



ALABAMA
PUBLIC
HEALTH

Alabama
Department of
Public Health

Annual Report 2019

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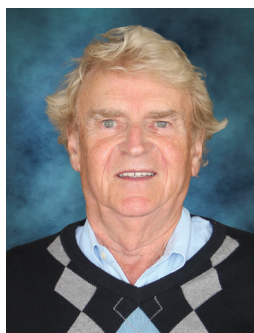
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A Letter from the State Health Officer

The Honorable Kay Ivey
Governor of Alabama
State Capitol
Montgomery, Alabama 36130

Dear Governor Ivey:

I am pleased to present the Annual Report of the Alabama Department of Public Health (ADPH) for 2019. As ADPH strives to fulfill our mission of promoting, protecting, and improving Alabama's health, we envision healthy people, healthy communities, and a healthy Alabama. Some of the successes and challenges of 2019 follow.

For the second consecutive year, Alabama's infant mortality rate fell to the lowest rate in the state's history, 7.0 infant deaths per 1,000 live births in 2018 (the most recent year for which data is available). A 37 percent decrease was noted in sudden unexplained infant deaths, which accounted for 17.3 percent of the total infant mortality rate. While we celebrated the improvement in birth outcomes for all racial groups, a longstanding racial disparity between birth outcomes remains with the infant mortality rate of African American infants being twice that of white infants. Alabama's infant mortality rate consistently ranks higher than the United States rate, and action must be taken.

Enhancements to the Children's Health Insurance Program (CHIP) continue and include the initiation of the ALL Babies Program to assist in reducing infant mortality in Alabama. At the outset, this pilot initiative for low-income women is limited to three counties with hopes of future expansion. Components of the initiative will provide comprehensive health coverage and case management services. Access to healthcare for Alabama children improved as enrollment in CHIP increased by more than 1,000 in 2019.

The use of the latest technology has improved service delivery to the public. During 2019, Alabama's Women, Infants, and Children (WIC) Program transitioned from paper food instruments to an electronic benefit transfer system which provides a better experience for WIC families and vendors. In addition, several features were added to the Alabama Prescription Drug Monitoring Program, a database of all controlled substances dispensed in Alabama.

The ADPH Pharmacy Division continues its involvement in activities aimed at fighting the opioid abuse crisis. Staff partnered with the Alabama Department of Mental Health to distribute resource information to targeted areas of the state. Information distributed included a 24/7 help-line number that people seeking treatment or information about substance use disorder can call to receive immediate assistance, including a peer counselor to help navigate treatment options.

An alarming increase in the use of alternative tobacco products and vaping among youth resulted in ADPH requesting healthcare providers report any cases of suspected, serious respiratory illness they treated among patients who used electronic cigarettes or other vaping devices. Efforts continue to help tobacco users quit and prevent exposure to secondhand smoke.

Initiatives also addressed chronic diseases and conditions such as hypertension and diabetes, suicide and violence prevention, and the administration of programs to improve healthcare access and quality in rural and medically underserved areas, among others.

ADPH continues to advocate for Alabamians to eat less and move more, knowing that small steps add up to success over time.

Communicable disease efforts included the investigation of 723 outbreaks and clusters in 2019. The year marked challenges that included a growing hepatitis A outbreak that began in 2018 and spread to 35 counties across Alabama. Hepatitis vaccination outreach efforts were undertaken to contact high-risk individuals, and vaccines were administered in correctional facilities, homeless shelters, substance use disorder clinics, and county health departments. ADPH investigated more than 6,000 potential rabies exposures and performed rabies tests on animals suspected of having exposed a human. An outbreak-like response was made to investigate bat exposure at a daycare center, and rabies post-exposure prophylaxis was recommended for numerous children at the center. Fortunately, no human cases related to the event were identified.

A wide range of important regulatory services continue to protect the public. These include enforcing standards in environmental health, emergency medical services, facility inspections, radiological health, and others. Screening and diagnostic services continue to be provided for Alabama residents. The Alabama Breast and Cervical Cancer Early Detection Program has provided free services for Alabama's underserved women for more than 21 years. The Alabama Newborn Screening Program, a comprehensive and coordinated system, received approximately 3,000 laboratory referrals and identified 168 infants with a newborn screening condition.

People and communities are central to our mission, and input from employees defined the department's core values of excellence, integrity, innovation, and community. To recognize the department's strong focus on the health and well-being of every Alabamian, a new official seal was designed and implemented, and 1- and 5-year strategic plans were developed to address areas of need and guide the department.

The culmination of years of effort will result in the opening of a state-of-the-art public health laboratory in 2020. This new facility will enhance our ability to identify and respond to current and emerging public health threats ranging from disease outbreaks to bioterrorism.

ADPH is proud of our compassionate, capable, flexible, and responsive staff of committed public health professionals, and the many partnerships we value in helping meet new and existing public health challenges.

Sincerely,



Scott Harris, M.D., M.P.H.
State Health Officer



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Mission

To promote, protect, and improve Alabama's health

Vision

Healthy People. Healthy Communities. Healthy Alabama

Core Values

Excellence – We believe in providing the highest quality services to our clients. We believe that all clients should be served with compassion, empathy, fairness, and respect.

Integrity – We believe our employees should be professional, competent, honest, and knowledgeable; maintaining the highest level of integrity, accountability, confidentiality, and concern for our clients. We believe in always striving to maintain the public trust.

Innovation – We believe that we should demonstrate the ability to adapt to change and to be flexible in our approach to solving problems and providing services.

Community – We believe that we should build and maintain internal and external partnerships to address public health challenges including effectively utilizing resources, solving problems, and building relationships.

Centralized Billing Unit

The Centralized Billing Unit (CBU) was created in May 2017 located within the General Operations Division. CBU's goal is to provide statewide county support for correction, resubmissions, and credit of claims to recover the maximum amount of revenue owed to the department. CBU provides administrative services to ensure compliance and integrity with all payer sources as well as local, state, and federal requirements.

In 2019, CBU submitted the first claims for disease control services rendered in the local county health departments for fully Medicaid-eligible patients. The ability to bill for these services helped with the financial reimbursement to continue to prevent the spread of sexually transmitted diseases and related sequelae such as preterm birth, congenital syphilis, and infertility. The ability to bill also satisfied the department's obligation to federal partners to seek additional funding to support prevention efforts.

CBU continued the great partnership with the Bureau of Information Technology (IT) working with the state-of-the-art in-house billing system, CLAIMS Integration, to bill for clinical and laboratory services to both state and third-party payers. CBU worked successfully with IT to bill for newborn screening services statewide. CBU also worked with legal and laboratory staff to implement a new fee schedule for the Bureau of Clinical Laboratories to be effective for the upcoming calendar year.

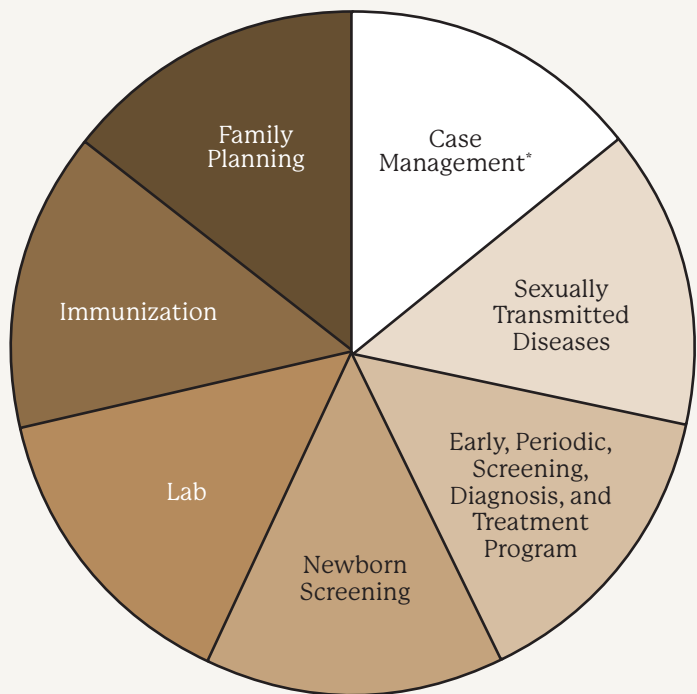
CBU's responsibilities include the following:

- Ensuring provider enrollment
- Re-enrollment
- Reactivation of provider status
- Serving as liaison for all payer sources including private and state agencies
- Utilizing current procedural terminology coding
- Billing contracts

- Credentialing
- Other reporting analysis and trends

CBU continues to look for opportunities for revenue expansion as well as expanding the services offered to our patients. The unit supports effective and efficient work processes to ensure accurate billing is done and to reduce error rates. CBU works closely with the central office, district, and county staff to ensure successful revenue recovery efforts.

Figure 1. Programs Assisted by CBU to Maximize Revenue

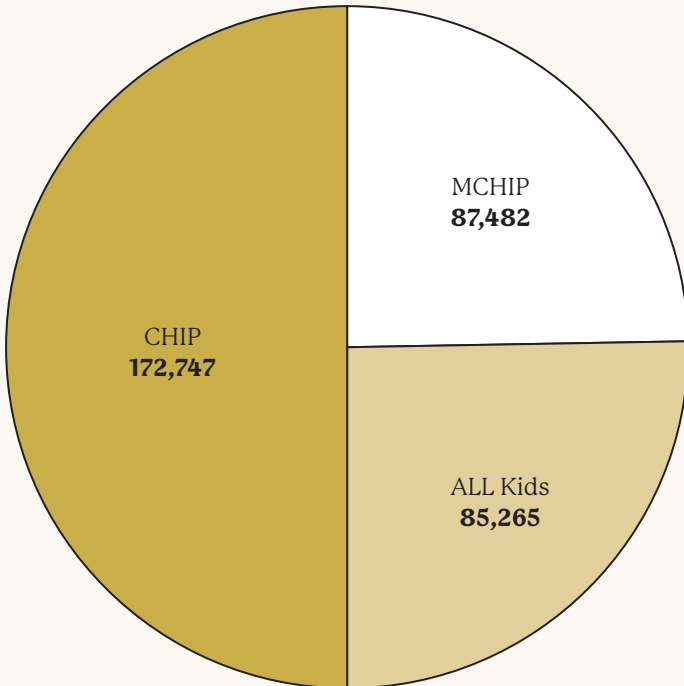


*Patient 1st Care Coordination and Plan 1st Care Coordination were terminated on September 30, 2019.

Bureau of Children's Health Insurance

The Bureau of Children's Health Insurance administers the Children's Health Insurance Program (CHIP). CHIP provides comprehensive health coverage to eligible children through a separate program known as ALL Kids. As a result of

Figure 2. Fiscal Year (FY) 2019 Enrollment Figures (As of September 2019)



provisions in the Affordable Care Act, in addition to the ALL Kids Program, CHIP also funds two groups of Medicaid-eligible children (MCHIP).

CHIP enrollment as of September 2019 was 172,747. Of this total, ALL Kids enrollment was 85,265 and MCHIP enrollment was 87,482. Combined, this is an increase of 1,191 children above September 2018's enrollment.

Enhancements to the program continue and include the ALL Babies program to assist in reducing infant mortality in Alabama. At the outset, this pilot initiative is limited to Macon, Montgomery, and Russell counties with hopes of future expansion. One component of the initiative will provide comprehensive health coverage while the other component will provide case management services. These services are designed for low-income pregnant women who are uninsured and do not qualify for Medicaid pregnancy coverage. The goal of this initiative is to positively impact pregnancy outcomes.

CHIP also enhanced outreach and education by adding outreach workers in some public health districts in the state. These employees work to identify uninsured children in Alabama who qualify for CHIP or Medicaid and assist that population in the application process. These employees also work toward ensuring retention of current CHIP enrollees by assisting them in submitting timely renewal applications to ensure no lapse in coverage occurs.

ALL Kids has continued to implement its new look and logo this year.

Bureau of Clinical Laboratories

The mission of the Bureau of Clinical Laboratories (BCL) is to improve and protect Alabama residents' health through laboratory science. The laboratory consists of the Administration, Business Operations, Clinical Chemistry, Logistics, Microbiology, Mycobacteriology and Mycotics, Newborn Screening (NBS), Quality Management, Sanitary Bacteriology, Sexually Transmitted Diseases (STD), and Mobile Laboratory divisions. Testing is funded through Medicaid receipts and federal grants.

Laboratory Quality

Laboratorians work diligently and are committed to ensure testing that supports public health. The BCL is credentialed by the Centers for Disease Control and Prevention (CDC), Food and Drug Administration (FDA), Environmental Protection Agency (EPA), and Clinical Laboratory Improvement Amendments to ensure quality test results. The BCL is in its fifth year of a \$1.5 million FDA grant to become International Organization for Standardization (ISO) accredited.

Distribution of Clinical Specimens and Environmental Specimens Received

The BCL offers an array of laboratory testing services at the main laboratory in Montgomery and a specialty laboratory in Mobile. A total of 1,739,170 laboratory tests were performed in 2019 for the 703,830 clinical specimens and 13,732 environmental samples received. The distributions of specimens are depicted in the accompanying figures (Figures 3 and 4).

Laboratory Information Management System (LIMS)

Electronic ordering and reporting allow for near real-time results. The number of clinical and environmental results reported electronically to partners continues to increase. The BCL Horizon LIMS updated to a new version, and its capacity continues to expand as new instruments are interfaced. It is interfaced directly with ADPH's electronic health record (EHR), the EHRs of Mobile and Jefferson counties, and interface capability is being developed with Health Services Center. Its upgraded web portal for private providers is much more robust and user friendly. The LIMS for the NBS Laboratory does not receive electronic requests but contains tools that facilitate billing, follow-up, and intervention. There is also a secure remote viewer for registered providers to retrieve NBS test results.

Clinical Chemistry Specimens Processed and Analyzed

The Clinical Services Branch receives specimens from county health departments, federally qualified health centers, and community-based human immunodeficiency virus (HIV) treatment programs to support the clinical management of their patients. This branch performs routine chemistry profiles, hepatitis screenings, complete blood counts, and CD4/CD8 T-lymphocyte subset enumeration. Analysis is performed by quantitative polymerase chain reaction (PCR) for HIV and hepatitis C (HCV) viral loads and for HIV genotype testing to determine drug resistance. In early

Figure 3. 2019 Distribution of Clinical Specimens Received at the BCL

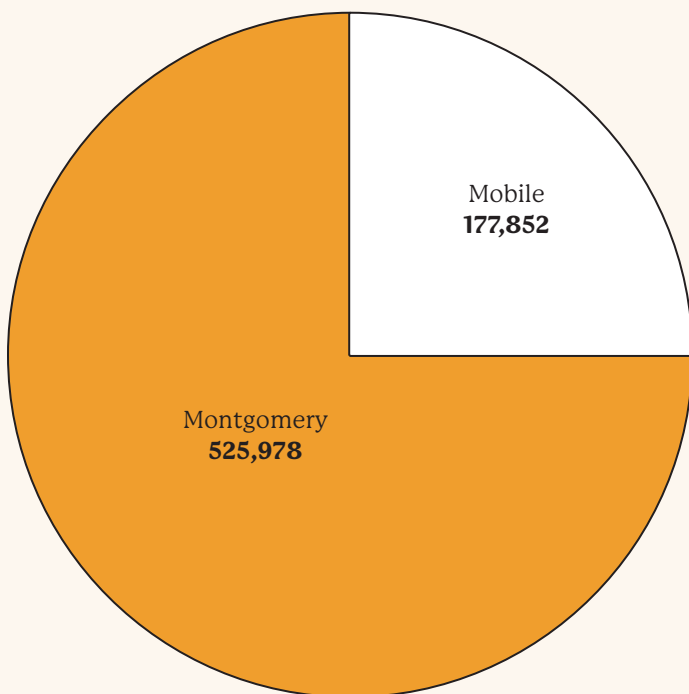
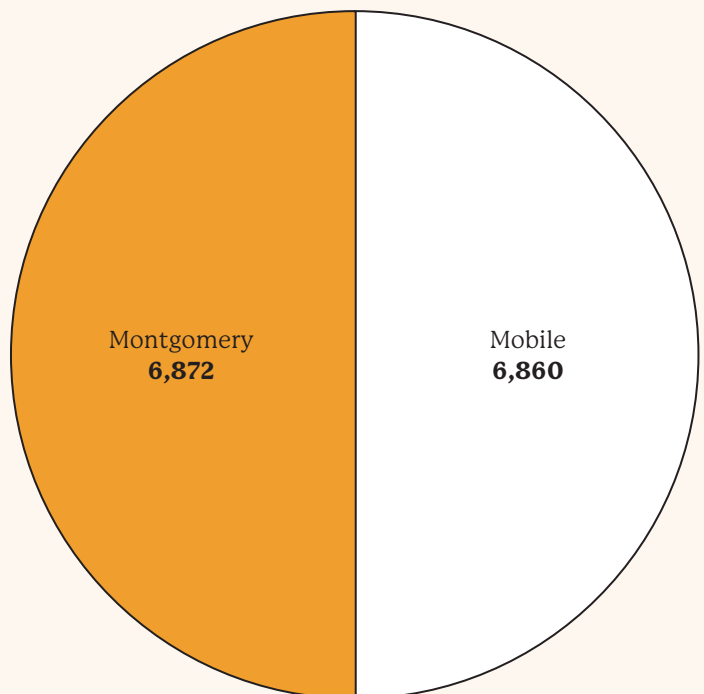


Figure 4. 2019 Distribution of Environmental Specimens



2019, HCV screening and viral load testing were successfully implemented. The Clinical Chemistry Division assists the Immunization Division with testing and sending specimens to CDC for an ongoing hepatitis A outbreak. The Lead Branch conducts testing in support of the department's Childhood Lead Program. The division processed and analyzed 21,350 specimens during 2019 (Figure 6).

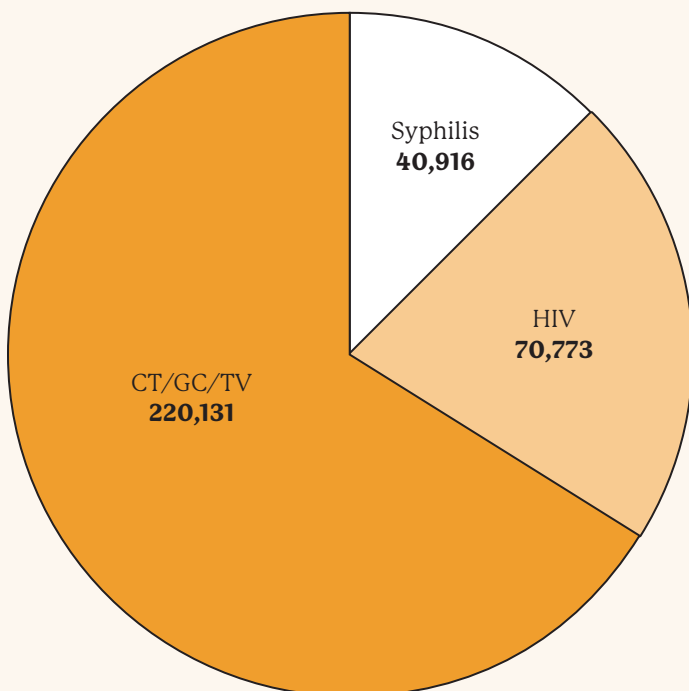
Infectious Disease Testing - Microbiology

Outbreaks: The Emerging Infectious Disease (EID) Branch continued to use syndromic panel testing to streamline and expedite outbreak detection. The respiratory panel was used to detect one non-influenza respiratory outbreak for human metapneumovirus. EID used a high throughput respiratory panel for surveillance and tested 270 specimens in which 153 were positive for human rhino/enterovirus, adenovirus, bocavirus, coronavirus, human metapneumovirus, influenza virus, *Mycoplasma pneumoniae*, parainfluenza, and respiratory syncytial virus.

As a participant in PulseNet, a national laboratory foodborne illness surveillance network that uses molecular techniques to detect outbreak clusters, EID transitioned from pulsed-field gel electrophoresis (PFGE) to whole genome sequencing (WGS). EID determined Alabama outbreak clusters of *Shigella sonnei*, *Listeria monocytogenes*, and *Salmonella*. Sample analyses contributing to 14 national outbreaks were posted to the PulseNet International Database. PFGE was also used to investigate an outbreak at an Alabama healthcare facility involving *Enterobacter asburiae* infections.

One hundred twenty-eight specimens associated with gastrointestinal outbreaks were analyzed. Of these norovirus, *Clostridium difficile* toxin, enteropathogenic *Escherichia coli*, and enteroaggregative *Escherichia coli* were identified.

Figure 5. 2019 Total Results Reported for HIV and STD at Montgomery Laboratory



Of the 94 norovirus specimens tested, 23 outbreaks were identified. Four hundred eight bacterial and mycobacterial specimens were identified using 16S sequencing. Three *Plasmodium falciparum* malaria cases were confirmed. For

Figure 6. 2019 Clinical Chemistry Specimens Processed and Analyzed

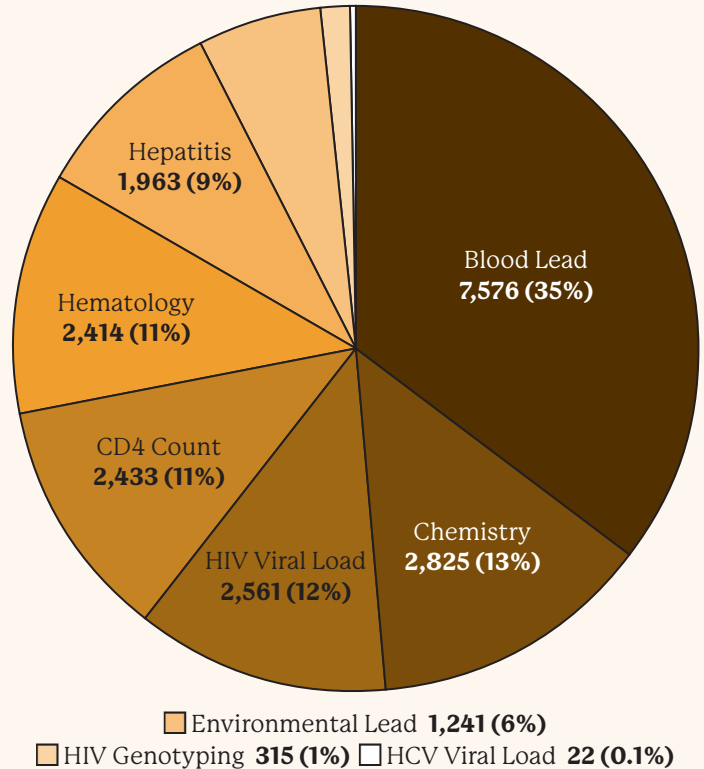
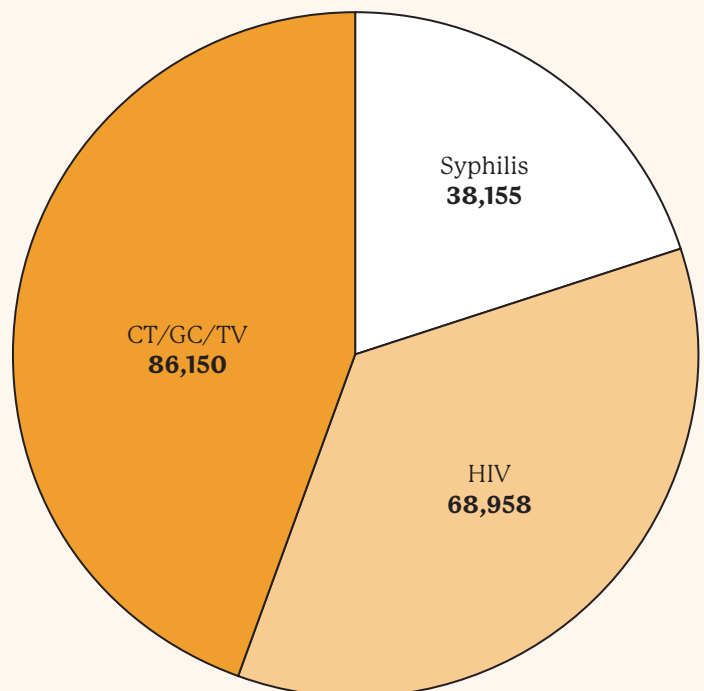


Figure 7. 2019 Total Specimens Received for HIV and STD at Montgomery Laboratory



meningococcal disease surveillance, 1,080 *Haemophilus influenzae* were serotyped and 2 *Neisseria meningitidis* were serogrouped. Influenza and arboviral testing remained a priority with 536 specimens tested for influenza virus and 671 specimens submitted for arboviral testing. A total of 217 specimens were tested using the Zika MAC ELISA with 2 presumptive positives and 4 inconclusive specimens submitted to the CDC for confirmation. Also, 416 specimens were tested with the reverse transcription PCR Triplex Arbovirus panel yielding no positives. Forty specimens were tested for *Bordetella* species with a positive *Bordetella pertussis* and an outbreak identified.

Conventional Microbiology worked with the CDC and the Jefferson County Department of Health on a Gonococcal Isolate Surveillance Project to track antibiotic resistance trends in *Neisseria gonorrhoeae*. Ninety-four specimens were collected and sent to the Antibiotic Regional Laboratory Network (ARLN) where they were collated and analyzed. This branch also tests for carbapenem resistant *Enterobacteriaceae* (CRE), *Pseudomonas aeruginosa* and *Acinetobacter baumannii*, and 67 specimens were forwarded to the ARLN for enhanced surveillance. Through this collaborative testing, it has been determined that *Klebsiella pneumoniae* carbapenemase-producing bacteria are endemic in the state. CRE is a growing concern in healthcare settings because these multidrug-resistant bacteria can cause serious and difficult-to-treat infections.

Preparedness: EID participated in a multi-state Ebola exercise through coordination with the Center for Emergency Preparedness (CEP), the Infectious Diseases and Outbreaks (ID&O) Division, and the state's three Ebola assessment hospitals. The Biological Terrorism (BT) Laboratory responded to suspected cases of botulism where one was confirmed as botulinum toxin B. Five specimens, including one environmental sample, were received to rule out agents of bioterrorism; one case of brucellosis was detected and the rare strain, *Francisella novicida*, was also confirmed.

The Chemical Terrorism (CT) Laboratory participated in a simulated sample reporting exercise and specimen packaging and shipping exercise in 2019. The lab is ramping up to participate in public health opioid surveillance testing. In conjunction with Alabama Department of Environmental Management (ADEM), the CT Laboratory continues testing freshwater fish samples for perfluorinated chemicals.

NBS

State law mandates every newborn be tested for certain metabolic, endocrine, hematological, and other genetic disorders. Initial screening is performed at birth, and a second screening is recommended at 2 to 6 weeks of age. The laboratory screens approximately 150,000 specimens for 48 different disorders translating to about 6 million total tests performed annually. Early identification of a potential disorder makes it possible to provide care for the newborn often before symptoms appear and helps ensure these infants receive life-saving treatments.

Tuberculosis (TB) and Fungal Infections

The Mycobacteriology Branch received 7,741 specimens for isolation and identification of *Mycobacterium tuberculosis*

complex as well as species of non-tuberculous mycobacteria (NTM). Using PCR-based technology, the TB Laboratory can confirm new smear positive patients in 2 hours. The TB Laboratory works with and provides TB Control staff genotyping data generated by the Michigan Department of Community Health. Both this PCR-based technology and genotyping information have been assets during outbreak investigations as they aid in determining their origins. The TB Laboratory uses Matrix Assisted Laser Desorption/Ionization-Time of Flight technology to rapidly identify NTM.

The Mycotics Branch reported 24 endemic yeasts (*Cryptococcus neoformans* and *Cryptococcus* species). A total of 2,363 specimens were received in this branch from county health departments and private providers.

HIV and STD Testing

The number of specimens tested in 2019 decreased by 9 percent. The incidence rates for chlamydia (9.6 percent), gonorrhea (5 percent), trichomoniasis (9 percent), syphilis (4.5 percent), and HIV (1 percent) remained unchanged for women and men attending adult health and STD clinics. The STD Branch received 193,263 specimens and performed 331,820 tests. (See breakdown in Figures 5 and 7.) *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, and *Trichomonas vaginalis* (CT-GC-TV) infections are detected using a nucleic acid test. The Bio-Rad BioPlex 2200 instrument implemented in 2019 is used to perform multiplex assays for syphilis and HIV testing. The CDC's reverse algorithm is followed for syphilis testing. The initial screening test for syphilis, syphilis total, and rapid plasma reagin (RPR) assay is a multiplex treponemal IgG/IgM immunoassay test which also produces results for the nontreponemal RPR test to determine past or recent infections. The BioPlex 2200 HIV Antigen/Antibody (Ag/Ab) Assay is performed to screen for HIV infections. This multiplex assay produces individual results for HIV 1 Ag, HIV 1 Ab, and HIV 2 Ab. When the HIV screen is positive, an antibody or nucleic acid test is used to confirm the infection. BCL evaluated a *Mycoplasma genitalium* PCR assay that determined prevalence within the state is 13 percent, higher than other STDs.

Mobile Division Laboratory

Shellfish/ Beaches Environmental Assessment and Coastal Health (BEACH)/Harmful Marine Phytoplankton Branch
The Mobile Division Laboratory collaborates with ADEM to meet EPA's BEACH Act requirements. Seven hundred sixty-one samples from coastal waterways were analyzed and reported. The division responded to numerous inquiries for data in response to cyanobacteria ("blue-green" algae) blooms along the Mississippi and Alabama Gulf Coast.

The laboratory also provides oyster growing water monitoring and harmful algal bloom (HAB) analysis. Laboratorians analyzed and reported results for 423 samples collected from coastal waterways for HAB monitoring. In addition, 404 water samples from oyster growing areas were tested in compliance with National Shellfish Sanitation Program guidelines. Oyster growing and harvest areas require monitoring for bacterial contamination and HAB concentrations to ensure a safe supply of shellfish. In efforts to achieve ISO 17025 accreditation, crab meat analysis

continues as the laboratory works to improve methodology and equipment automation. The division received a grant through Alabama Department of Conservation and Natural Resources to establish a *Karenia brevis* enzyme-linked immunosorbent assay confirmation method.

Mobile Division Clinical Branch

The Mobile Clinical Branch also performs CT-GC-TV and syphilis testing. The laboratory performed 141,226 tests for CT-GC-TV and tested 33,238 specimens for syphilis. The Urine Culture and Sensitivity Branch analyzed 723 specimens for pathogens and antimicrobial sensitivity. The division was selected to participate in an automated RPR study to determine performance characteristics among various instrument platforms. Funding is provided by the Association of Public Health Laboratories and CDC.

Mobile Division Environmental Testing

The Drinking Water Section tested 4,820 samples from public systems and private wells in support of the Safe Water Act under contract with ADEM.

Sanitary Bacteriology/Media Division

The Sanitary Bacteriology/Media Division tests dairy products, public and private water, and fluoride samples as well as prepares media used by both the county health departments and the BCL. Testing was conducted on 1,411 dairy samples to include raw producer, tank truck, and finished dairy products. Testing was performed on 888 fluoride samples. The laboratory provides proficiency testing for the milk laboratories in the state. Working with the FDA, five milk laboratories were inspected for compliance with state and federal regulations. The laboratory tested 2,961 public and private water samples in support of the Safe Water Act. While continuing work with ADEM, 15 public water utility laboratories were inspected for compliance with state and federal regulations. The Media Branch made 5,810 liters of media in support of NBS, microbiology, milk and water, mycology, TB, and EID programs.

Rabies

Mobile and Montgomery laboratories both test animals for rabies. Of the 1,590 animals received for testing, 48 were positive for the rabies virus. Notably, the presence of a positive horse and multiple positive fox and raccoon specimens generated significant public health interest.

Bureau of Communicable Disease

The mission of the Bureau of Communicable Disease is to prevent and control designated communicable diseases and illnesses in Alabama. The bureau consists of the following divisions: Immunization (IMM), Infectious Diseases and Outbreaks (ID&O), Sexually Transmitted Diseases (STD), and Tuberculosis (TB) Control. HIV/AIDS information is now listed separately.

IMM

The IMM Division goal is to reduce vaccine-preventable diseases and increase immunization rates. IMM has four branches: Surveillance, Registry (Immunization Patient Registry with Integrated Technology [ImmPRINT]), Vaccines for Children (VFC) and Immunization Quality Improvement Program (IQIP), and Administration.

The Surveillance Branch conducts the Annual School Survey, in conjunction with the Alabama Department of Education and private schools. This survey evaluates the immunization status of all children to ensure they have a current Certificate of Immunization (COI) or a valid exemption on file in compliance with the 2009 School Immunization Law and Rules. In the 2018-2019 Annual School Entry Survey, all medical and religious exemptions combined continue to be less than 1 percent (.77 percent) for students in public and private schools. The percent of students with expired and no COI was 5.6, an increase from the previous year from 4.0. In addition, the branch oversees vaccine-preventable disease investigations statewide. IMM field staff investigate vaccine-preventable disease reports submitted by notifiable disease reporters and laboratories. In 2019, the IMM field staff investigated and confirmed 1,103 cases of diseases. In

addition, they investigated 5 outbreaks; 3 were pertussis, 1 was varicella, and 1 was a large ongoing hepatitis A outbreak. The outbreak started in 2018 and continues. As of December 23, 2019, there were 226 confirmed cases in 35 counties stretching across Alabama.

The VFC Branch manages Alabama's VFC Program, a federal entitlement program that provides vaccine at no cost to providers who see children under 19 years of age who are uninsured, Medicaid-eligible, under-insured, American Indian, or Alaskan Native. As of December 2019, 507 enrolled public and private providers received approximately \$68 million worth of vaccines. As part of the vaccines distributed, the VFC Program provided 194,400 doses of seasonal influenza vaccine to providers in all 67 counties. Field staff perform regulatory VFC site and IQIP Program assessment visits on 50 percent of enrolled providers to promote proper vaccine storage and handling, accurate and safe administration of vaccine, and vaccine coverage improvement. The VFC Branch also manages the federal Section 317 funding for vaccines for uninsured/underinsured adults. As of December 2019, the branch distributed over \$1 million (20,080 doses) of 317-funded adult hepatitis A vaccine to providers throughout the state for use during the hepatitis A outbreak. The branch also distributed \$12,200 (1,000 doses) of 317-funded influenza vaccine that was used in conjunction with the ADPH Center for Emergency Preparedness for pandemic influenza exercises.

The Registry Branch manages the state's immunization registry, ImmPRINT, for all residents of Alabama. Sites can submit vaccine information manually or by electronic interface. The branch coordinates the interfaces between ImmPRINT and providers' electronic medical record who submit vaccine information, which include 2-way communication. There are over 5 million patients of all ages and over 60 million vaccine doses recorded in ImmPRINT.

Figure 8. Cases Classified As Vaccine-Preventable Disease Cases in Alabama

Disease	2015	2016	2017	2018	2019
Diphtheria	0	0	0	0	0
<i>H. influenzae</i>	-	79	86	127	119
Hepatitis A	-	-	21	40	225
Hepatitis B	-	-	21	40	64
Measles	0	0	1	0	0
Meningococcal	-	5	4	5	3
Mumps	1	2	35	17	15
Perinatal Hepatitis B	0	0	0	0	0
Pertussis	170	165	226	225	220
Polio	0	0	0	0	0
Rubella	0	0	1	0	0
<i>Strep. pneumoniae</i>	-	341	375	554	372
Tetanus	1	1	1	0	0
Varicella	174	100	93	93	85
Total	346	693	864	1,101	1,103

Figure 9. Number of Active Sites Recorded in ImmPRINT

Year	Source	Number of Vaccine Submitted	Grand Total
2015	Manual	304,407	1,439,168
	Interface	1,134,761	
2016	Manual	453,800	1,846,835
	Interface	1,393,035	
2017	Manual	436,133	2,067,434
	Interface	1,631,301	
2018	Manual	410,401	1,906,688
	Interface	1,496,287	
2019	Manual	1,904,806	4,012,717
	Interface	2,107,911	

Figure 10. Number of Active Sites Recorded in ImmPRINT

Year	Source	County Health Department	Clinic	FQHC/RHC	Hospital	Pharmacy	Schools	Childcare Center	Sub-Total	Grand Total
2015	Manual	68	432	68	23	36	546	2	1,175	3,532
	Interface	7	595	86	56	333	0	0	1,077	
2016	Manual	69	571	78	27	60	1,578	3	2,386	3,489
	Interface	5	606	86	60	346	0	0	1,103	
2017	Manual	71	685	86	34	109	1,664	242	2,891	4,057
	Interface	5	655	89	63	354	0	0	1,166	
2018	Manual	71	801	98	41	241	1,701	339	3,292	4,572
	Interface	4	720	99	66	391	0	0	1,280	
2019	Manual	39	818	88	38	304	1627	314	3,228	4,623
	Interface	37	648	106	62	542	0	0	1,395	

The Administration Branch manages state and federal budgets with over 50 staff statewide, including contracts, grants, payroll, leave, and personnel.

ID&O

The ID&O mission is to protect the health of Alabama residents by monitoring and investigating select infectious, zoonotic, and environmental diseases and events. The table below demonstrates the number of disease reports that were counted as cases according to the criteria established by the Council of State and Territorial Epidemiologists and the Centers for Disease Control and Prevention (CDC) in 2019 as compared to the previous 4 years.

Outbreak Investigations

ID&O defines an outbreak as the occurrence of more cases of disease than expected in a given area or among a specific group of people over a particular period of time linked to a common exposure; a cluster is defined similarly, except a common exposure is not identified. Single cases or exposures related to certain rare and serious conditions, such as gastrointestinal anthrax, botulism, rabies, or healthcare-associated *Legionella*, may illicit an outbreak-like response. All reporters, as outlined in the Notifiable Disease Rules, are required to report outbreaks of any kind within 24 hours of presumption. In 2019, 723 outbreaks and clusters were investigated. Interdisciplinary, collaborative efforts among state and federal partners aided in the identification of causative agents, likely modes of transmission, and underlying environmental causes of illness. A few of these investigations are described below.

Enterobacter asburiae Outbreak Among Patients at a Hospital

In August, a hospital located in the Northern District reported six patients ill with cough, fever, headache, shortness of breath, and discoloration of sputum. After testing, all patients were found to be positive for *Enterobacter asburiae*. Four isolates were forwarded to the Bureau of Clinical Laboratories for additional subtyping using PFGE. CDC's Healthcare Associated Infections (HAI) Outbreak Investigation form was used to capture epidemiologic information. After reviewing the investigation forms, medical records, and lab results, it was concluded that the patients were exposed to a common source of infection.

Since all the patients underwent nebulization therapy at some point during their stay, a breach in infection control practices during the procedure was identified as a potential cause. The hospital's infection preventionist (IP) shared the established protocols followed during nebulization therapy at the facility; the facility met standard procedure requirements. The IP conducted direct observations of both respiratory therapy and nursing staff; however, no breach was observed in the chain of infection control. The IP corroborated that all patients had the same respiratory therapist. The implicated therapist, though asymptomatic, was tested for the organism; all laboratory results were negative.

Although a definite cause of infection was not identified, recommendations were provided on practicing standard infection control precautions during patient procedures. The IP was also advised to report any additional cases to ID&O so that an environmental assessment could be conducted. No new cases were reported, and the investigation was closed.

An Outbreak-like Response to Bat Exposure at a Daycare

On June 19, 2019, ADPH received a complaint from a parent of a daycare attendee stating that there were bats in the daycare center located in Bullock County. Due to the potential for rabies exposure, the local environmentalist visited the facility where he interviewed the owner and inspected the location. The owner reported that on two separate occasions dead bats were removed from the facility and the carcasses were discarded in the yard of the facility. A bat expert was contacted, and bats were discovered inhabiting the daycare attic and a separate dead space. At the recommendation of the state public health veterinarian, the Department of Human Resources recommended closure of the facility until the bats could be professionally eradicated, the waste products removed, and the roosting areas decontaminated and sterilized. The daycare complied with the request and contracted with a bat expert and professional cleaning company to conduct the work.

Out of an abundance of caution, rabies post-exposure prophylaxis was recommended by the department's chief medical officer for all children who were currently in attendance and for those who attended within the 3

Figure 11. Select Alabama Notifiable Disease Case Counts, by Year*

Diseases	2019	2018	2017	2016	2015
Acute Flaccid Myelitis	0 [^]	--	--	--	--
Anthrax	0	0 [^]	0	0	0
Arboviral Diseases (excludes Chikungunya Virus, Dengue, and Zika Virus)	6	28	62	18 [^]	9 [^]
Babesiosis	0	0	1	0	2
Botulism	1	0	0	1	1
Brucellosis	4	1	0	0	2
Campylobacteriosis	748	783	790	692	589 [^]
Chikungunya Virus	0	0	1	1 [^]	1 [^]
Cholera	0	0	0	0	0
Coccidioidomycosis	8	--	--	--	--
Cryptosporidiosis	219	152	189	334	261
Cyclosporiasis	5	--	--	--	--
Dengue	3	3	0	5	3 [^]
<i>E. coli</i> , Shiga Toxin-producing (includes O157: H7)	135	129 [^]	31	39	40
Ehrlichiosis/Anaplasmosis	39	24	17	21	18
Giardiasis	156	217	191	234	188
Hansen's Disease (Leprosy)	0	0	1	1	1
Hantavirus Pulmonary Syndrome	0	--	--	--	--
Hemolytic Uremic Syndrome (HUS)	6	3	0	6	3
Hepatitis E, Acute	0	0	0	0	0
Influenza-associated Non-pediatric Mortality	93	257	--	--	--
Influenza-associated Pediatric Mortality	2	2	1	0	1
Legionellosis	72 [^]	76	66	63	59
Leptospirosis	0	1	0	0	0
Listeriosis	7	11	5	8	5
Lyme Disease	65	36	39 [^]	38	25
Malaria	9	9	8	10	11
Novel Influenza A Virus Infection	0	0	0	0	0
Paratyphoid Fever	0	6 [^]	3	9	0
Plague	0	0	0	0	0
Psittacosis	0	0	0	0	0
Q Fever	2	2	0	1	0
Rabies, Animal	48	55	51	77	83
Rabies, Human	0	0	0	0	0
Salmonellosis	988	1,198 [^]	1,129 [^]	1,276	1,151
Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)	0	0	0	0	0
Shigellosis	394	320	247 [^]	239	680
Smallpox	0	0	0	0	0
Spotted Fever Rickettsiosis	478 [^]	673	671	453	288
Toxic Shock Syndrome (Non-streptococcal)	0	--	--	--	--
Trichinellosis (Trichinosis)	0	0	0	0	0
Tularemia	4	0	1 [^]	1	0
Typhoid Fever	0	1	1	0	0
Vibriosis (Non-cholera)	38	38	26 [^]	31	19
Viral Hemorrhagic Fever	0	0	0	0	0
VISA (<i>Staphylococcus aureus</i> , Vancomycin-Intermediate)	1	1	4	3	2
VRSA (<i>Staphylococcus aureus</i> , Vancomycin-Resistant)	0	0	0	0	0
Yellow Fever	0	0	0	0	0
Zika Virus	0	3	4	41 [^]	0 [^]
Other Investigations	3	0	0	0	0
Total	3,534	4,029	3,539	3,602	3,442

*Preliminary counts include finalized investigations among Alabama residents as of January 9, 2020. These case counts do not include those for conditions investigated by other divisions.

[^]The other investigations category includes a variety of conditions or events that have been

investigated but are not reportable in Alabama or do not fall into any other category (such as histoplasmosis, streptococcal toxic-shock syndrome, yersiniosis).

[^]The case definition was updated this year for this condition.

months prior to the date of closure. Administration was a coordinated effort between the children's primary care providers and local hospital emergency rooms. ADPH assisted with purchasing the medication (HRIG and vaccine) for most of the recipients due to the financial strain it would place on the small rural hospital where the patients were concentrated. Rabies post-exposure prophylaxis was initiated and completed for 90.2 percent of the children identified as at risk of exposure. Most parents and guardians chose to complete the full vaccination series; however, a small percentage either did not complete the series or chose not to have their child treated at all. To date, no human rabies cases related to this event have been identified.

A Norovirus Outbreak at a University

On September 10, 2019, a university student health center notified ID&O of 15 students ill with nausea, vomiting, or diarrhea. Initial laboratory testing identified norovirus as a cause of illness. The investigation identified four campus food workers who were ill with vomiting and diarrhea prior to the reported outbreak. A questionnaire was distributed to 11,800 students and university staff via e-mail, out of which 1,316 responses were received, and 111 norovirus cases were identified. Only 30 percent of sick persons had eaten at the university cafeteria. This suggests that the majority of the norovirus cases were a part of an ongoing community norovirus outbreak during which a smaller outbreak occurred as norovirus was introduced into the cafeteria, possibly from sick food workers. Quick implementation of norovirus control measures likely limited the scope of this outbreak within the university community.

Arboviral (Mosquito-borne) Surveillance

In 2019, ID&O investigated 183 reports of suspected human arboviral illness; of which, 10 percent were determined to be cases. The majority of investigations were for Zika virus (77 percent) or West Nile virus (WNV) (13 percent). No cases of illness associated with Zika virus and three cases of dengue, all travel-related, were identified. Five cases of WNV were identified, and the risk of WNV as well as other endemic arboviruses such as Eastern Equine encephalitis (EEE) and St. Louis encephalitis remain an ongoing threat to Alabamians.

Fatal EEE Case in Alabama

In September, an individual from the Southwestern District became ill with nausea, vomiting, diarrhea, and fever, and was subsequently admitted to a local hospital. Initially suspected to be a case of rabies, the individual was eventually identified as a case of EEE. Specimens were forwarded to CDC for confirmatory laboratory testing. Unfortunately, the individual expired before these results were received.

Based on preliminary test results, an investigation was initiated and included enhanced mosquito surveillance. Prior to this case being identified, EEE-positive equines, sentinel chickens, and a pooled sample of mosquitoes were reported in the Mobile and Southwestern districts. The ID&O public health entomologist, aided by a CDC entomologist and in cooperation with district staff, trapped, identified, and tested mosquitoes from several locations throughout the district where the individual had spent time prior to becoming ill. The primary EEE mosquito vector and numerous bridge vectors were collected and identified. Mosquitoes were tested for

Figure 12. Human Arboviral Investigations and Cases in Alabama, 2019*

Arboviral Disease	Investigations	Cases
California Encephalitis	0	0
Chikungunya	1	0
Dengue (All Travel-related)	6	3
Eastern Equine Encephalitis	2	1
Jamestown Canyon	0	0
La Crosse Encephalitis	0	0
Powassan	0	0
St. Louis Encephalitis	0	0
West Nile Virus	24	5
Yellow Fever	0	0
Zika Virus	141	0
Total	174	9

*As of January 7, 2020

EEE, WNV, St. Louis encephalitis, Zika, and dengue viruses; all laboratory results were negative. Due to the number and species of mosquitoes collected, as well as continued warm weather conditions, control measures were recommended to local mosquito control agencies and the public.

Influenza Activity

CDC classified the 2018-19 influenza season (September 30, 2018 - May 18, 2019) as a moderate severity season. This classification was derived based on increasing levels of outpatient visits for influenza-like illness (ILI) starting in November, with a peak in mid-February, and not returning to baseline until mid-April, making this the longest season in 10 years. Nationally, two waves of influenza A were noted during this extended season. Alabama's influenza and ILI activity began increasing in mid-December, with an initial peak at the beginning of January (5.15 percent), and another in mid-February (8.93 percent). Alabama's activity returned to baseline at the beginning of April. Additionally, this season was unique in that no influenza B strains were detected; influenza A (H3) and A (2009 H1) were the predominant strains detected. Finally, there were 97 nonpediatric influenza-associated deaths and 1 pediatric influenza-related death reported during the season.

As a participant in the U.S. Outpatient ILI Surveillance Network, medical providers submit the percentage of patient visits at their facilities attributable to ILI each week. These data are used to measure ILI activity and to assess geographic spread of influenza across the state. These data are essential for monitoring which influenza viruses are circulating, helping determine which influenza strains should be included in the seasonal vaccine, and detecting rare events such as novel influenza or antiviral resistance.

HAIs

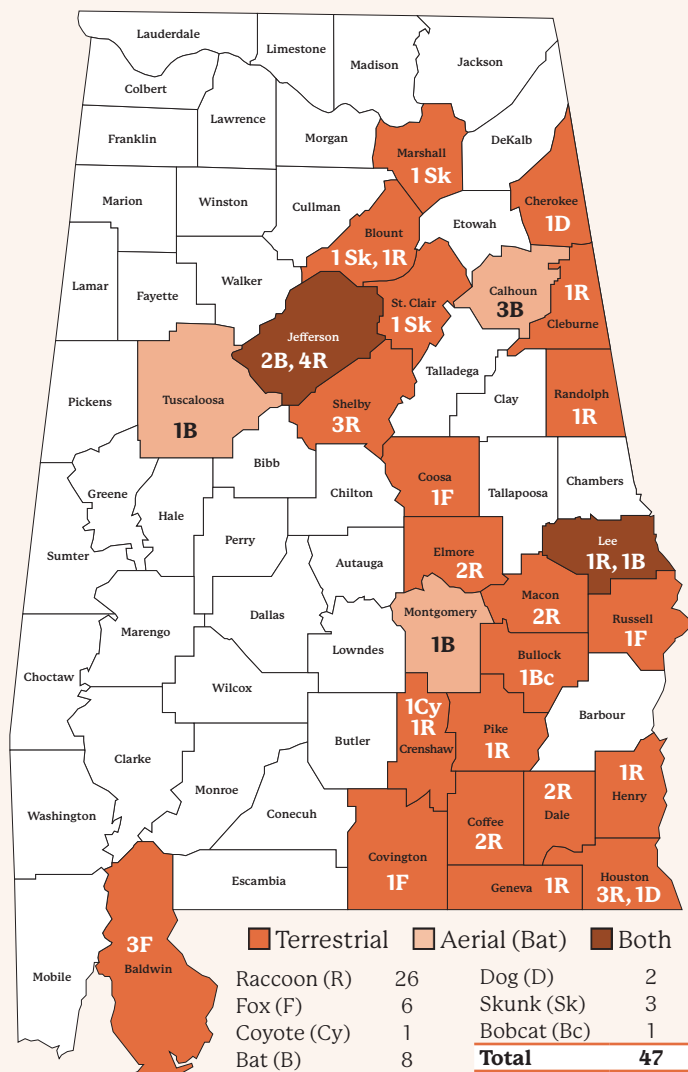
Alabama remains committed to reducing HAIs in its hospitals. Alabama hospitals began reporting four infection measures to the department in 2011: catheter-associated urinary tract infections (CAUTIs), central line-associated

bloodstream infections (CLABSIs), surgical site infections (SSIs) associated with colon surgeries, and SSIs associated with abdominal hysterectomies. This data represents Alabama's eighth year of reporting infection measures. In 2018, Alabama hospitals had significantly fewer CAUTIs, CLABSIs, and colon SSIs than predicted using national baseline data. SSI counts for abdominal hysterectomies were statistically similar to the numbers predicted.

Rabies

In 2019, the department investigated over 6,000 potential rabies exposures, and performed 1,432 rabies tests on animals suspected of having exposed a human. ID&O confirmed 47 animal rabies cases. Of those, 96 percent were identified in wild animals (raccoons, foxes, coyotes, bats, skunks, and bobcats) and 4 percent were identified in domestic animals. Animal case counts include animals tested at the BCL, as well as positives reported from the U.S. Department of Agriculture Wildlife Services. News releases were issued when positive cases occurred to

Figure 13. Reported ID&O Confirmed Animal Rabies Cases in Alabama, 2019



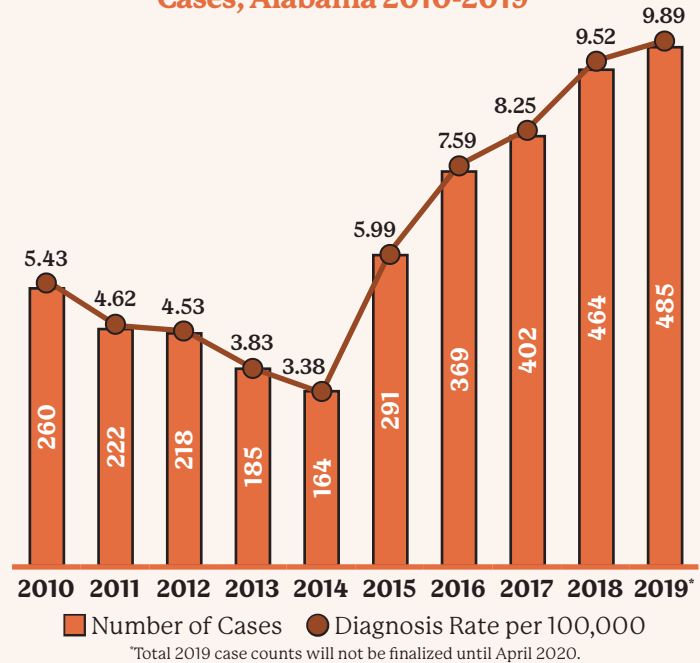
provide education about rabies in wildlife and highlight the importance of vaccination of domestic animals.

STD

Primary and Secondary Syphilis

In 2019*, reports of an estimated 485 cases of primary and secondary syphilis infection were received. This case count, which corresponds to a rate of 9.9 cases per 100,000 population, indicates the fifth consecutive year primary and secondary syphilis have increased in Alabama.

Figure 14. Primary and Secondary Syphilis Cases, Alabama 2010-2019*



Congenital Syphilis

In 2019, 14 reported cases of congenital syphilis, including 1 syphilitic stillbirth and 2 infant deaths, were reported to ADPH. The report represents a 100 percent increase from the 7 congenital syphilis cases reported in 2018, and reflects a rate of 24.2 congenital syphilis cases per 100,000 live births. To prevent congenital cases in Alabama, ADPH recommends prenatal screening for syphilis in all pregnant women during the initial prenatal visit, at 28 to 32 weeks gestation, and before delivery. According to the CDC, obstetricians must treat pregnant women with a positive syphilis test at least 30 days before delivery to prevent maternal transmission.

Chlamydia

In 2019*, ADPH received reports of a total of 29,293 cases of *Chlamydia trachomatis* infection. This case count equals a rate of 597.4 cases per 100,000 population. For the third consecutive year, nearly 30,000 cases of chlamydia were reported to ADPH.

The overall rate of chlamydial infection in Alabama was highest among females at 791.6 cases per 100,000 females compared to males at 389.8 cases per 100,000 males. The rate of reported chlamydia cases remained highest among blacks (890.3 cases per 100,000 population), Hispanics

Figure 15. Chlamydia Cases, Alabama 2010-2019*

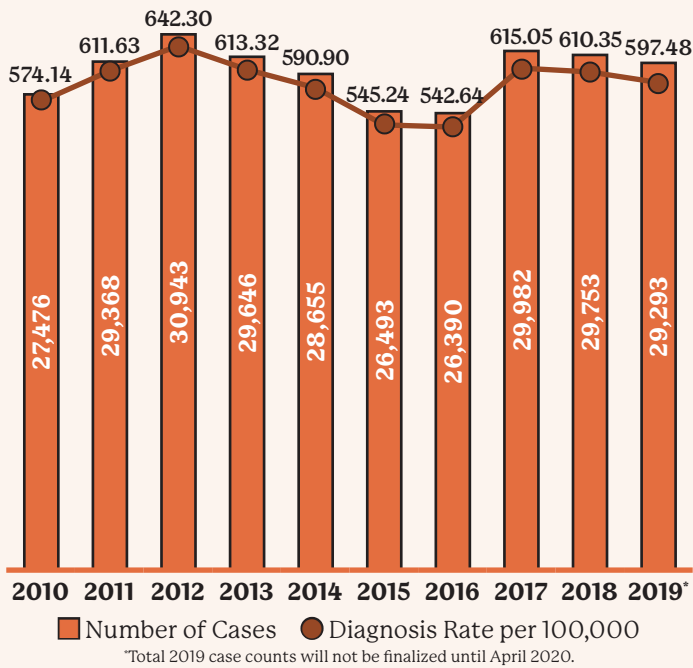
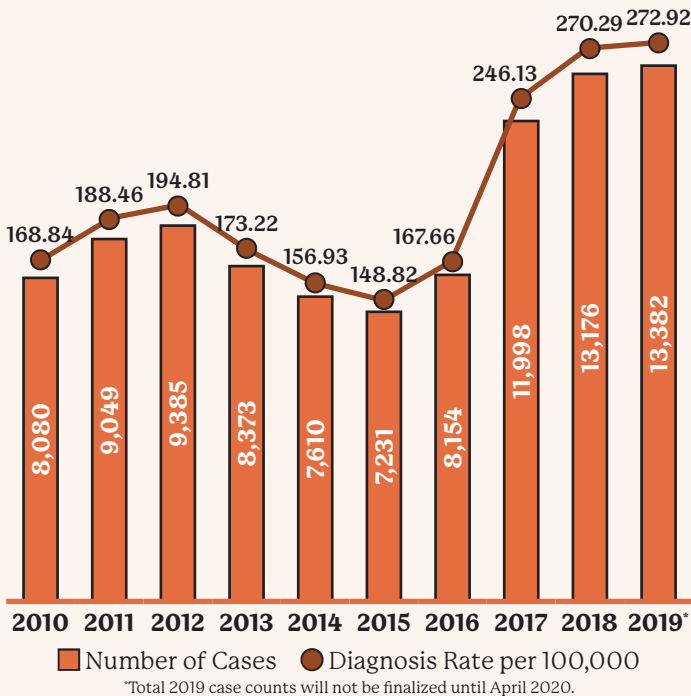


Figure 16. Gonorrhea Cases, Alabama 2010-2019*



(288.8 cases per 100,000 population), and whites (112.7 cases per 100,000 population).

Nearly 52 percent of the chlamydia cases reported in 2019* were residents of Jefferson (5,371 cases), Mobile (3,132 cases), Madison (2,654 cases), Montgomery (2,402 cases), and Tuscaloosa (1,456 cases) counties.

Persons age 20-24 and age 15-19 accounted for 38.0 percent and 31.2 percent of the chlamydia cases reported in 2019*,

respectively. This demonstrates the need to engage adolescents and young adults in discussions on sexual health topics.

Gonorrhea

In 2019*, 13,382 cases of *Neisseria gonorrhoeae* infection were reported to the ADPH. This case count corresponds to a rate of 272.9 cases per 100,000 population. The number of reported gonorrhea cases has increased by 85.1 percent since 2015.

In 2019*, the rate of reported gonorrhea cases remained highest among blacks (476.6 cases per 100,000 population), followed by whites (55.8 cases per 100,000 population), and Hispanics (51.0 cases per 100,000 population). The number of gonorrhea cases reported among males (approximately 51 percent) and females (approximately 48 percent) has remained relatively stable between 2016-2019.

Nearly 50 percent of the gonorrhea cases reported in 2019* were residents of Jefferson (2,783 cases), Madison (1,321 cases), Mobile (1,424 cases), and Montgomery (1,118 cases) counties.

Persons age 20-24, persons age 15-19, and persons age 25-29 accounted for 32.1 percent, 21.0 percent, and 20.5 percent of the gonorrhea cases reported in 2019*, respectively.

Of the gonorrhea cases reported in 2019*, persons age 15-19 accounted for 21.0 percent of cases; persons 20-24 accounted for 32.1 percent of cases; and persons age 25-29 accounted for 20.5 percent of cases.

TB Control

The ultimate goal of the Division of TB Control is to eliminate TB in Alabama. Until that goal is reached, the division strives to reduce the annual burden of disease, limit transmission, and prevent future cases through the provision of diagnostic, treatment, case management, and contact investigation activities. The division provides these services to all persons in Alabama, regardless of the ability to pay. This commitment to the citizens of Alabama has contributed to the historic decline in morbidity illustrated in the accompanying chart.

In 2019, the division evaluated 165 persons suspected of having TB, eventually ruling out disease in 78 suspects and confirming active TB disease in 87 patients. This figure represents a 4.39 percent decrease in confirmed cases from the 91 cases reported in 2018.

Figure 17. Historical Trend of TB Cases in Alabama

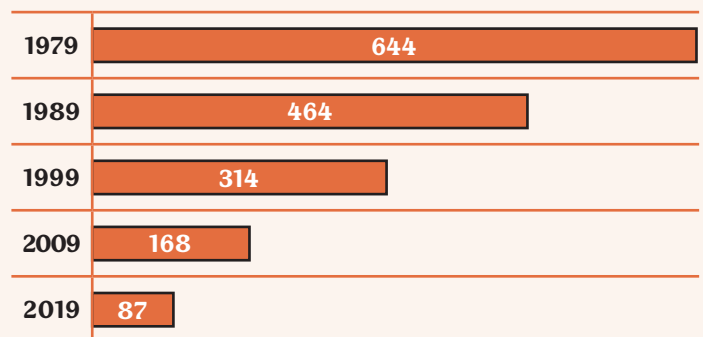
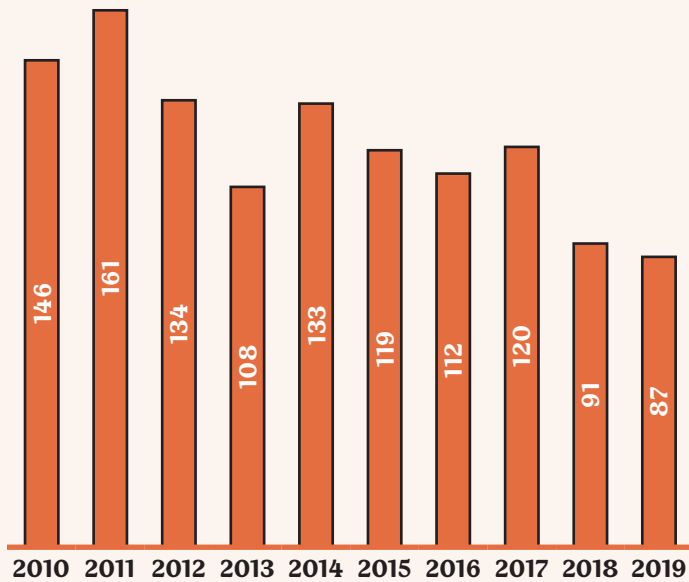


Figure 18. TB in Alabama - 2009 through 2019

The 10-year trend in confirmed active cases of TB as illustrated above reveals an overall decline of 48.2 percent in verified TB cases (from 2009 to 2019). However, morbidity reported over the past 5 years has demonstrated far less progress in the continuing steady decline of reported TB cases. Since 2013 when Alabama reported a historical low of 108 cases, TB cases have remained relatively steady until 2019, and have increased in some years during the

previous 5-year period. During the past 5 years, Alabama has reported an average of 106 cases per year, a 33-case decrease compared to the historical high reported in 2017.

In addition to the identification, evaluation, and treatment of persons with active TB, the division seeks to prevent future cases through prompt identification and medical evaluation of contacts at risk for exposure, and to assure the initiation and completion of preventive therapy for those contacts diagnosed with latent TB infection (LTBI). Preliminary data for 2019 shows that 775 persons were identified as contacts to TB cases classified as Acid Fast Bacilli (AFB) sputum smear positive cases, and that 680 (88 percent) of those contacts were fully evaluated. Of the number of persons who were fully evaluated, initial reports indicate that 47 of 48 persons (98 percent) were diagnosed with LTBI and were placed on preventive treatment for LTBI by division staff.

The division continues to place great emphasis on the identification of persons at high risk for progression to active TB disease. Some groups of persons who are diagnosed with LTBI are at increased risk for rapid progression to TB disease including persons who are close contacts to AFB smear positive cases; individuals diagnosed with certain immunocompromising medical conditions such as HIV, diabetes, and others; persons who are foreign-born from countries with a high prevalence of TB (immigrants or refugees), and persons who abuse drugs and alcohol. Treating these persons preventively protects the individual and the community at large from developing TB disease.

Office of Emergency Medical Services (OEMS)

The OEMS is responsible for protecting the health, safety, and welfare of the public by assuring that emergency medical services (EMS) provided by response agencies, training entities, and technicians meet or exceed established standards. The OEMS investigates complaints and may exercise its authority to deny, place on probation, suspend, or revoke licensure when statutory or regulatory violation is substantiated.

Figure 19. EMS Personnel – Personnel Licensed by OEMS by License Type

License Type	Number of Personnel
Advanced Emergency Medical Technician (EMT)	995
Emergency Medical Responder	78
Emergency Medical Technician	6,353
Intermediate	239
Paramedic	4,783
Critical Care Paramedic	270
Total	12,718

Alabama Acute Health Systems

Trauma System

The Alabama Trauma System (ATS) currently consists of 61 trauma centers, including out-of-state trauma centers. The efforts and dedication of trauma centers, EMS, the Alabama Trauma Communications Center, regional EMS, and state and regional councils working together facilitate timely routing of trauma patients to the appropriate hospitals.

In 2019, 14,358 patients were entered into the trauma system. The most common mechanism of injury was motor vehicle related.

Alabama Head and Spinal Cord Injury Registry/Alabama Trauma Registry

During 2019, rules for the Alabama Head and Spinal Cord Injury Registry (AHSCIR) were updated. AHSCIR rules are for all acute care hospitals in Alabama, regardless of their participation in the ATS. Patients with specific head and spinal cord injuries are required to be entered in the registry. ADPH provides the Alabama Department of Rehabilitation Services information so it can contact these patients to provide information on services that patients may be eligible to receive.

The Alabama Trauma Registry is an integrated database that collects patient data from the trauma centers. Data is used for system quality improvement and research in collaboration with other entities.

Stroke System

The Alabama Stroke System was activated statewide on October 30, 2017. The primary goal of the stroke system is to maintain a stroke emergency care system that results in 100

percent tPA (tissue plasminogen activator) administration to all eligible patients as well as decreased stroke mortality and disability. Patients who are experiencing symptoms of a stroke need to be rapidly evaluated at a hospital and treated within a few hours of the onset of symptoms to either reverse the stroke or minimize the damage, if possible. Because tPA must be administered within the first few hours of acute ischemic stroke onset, the system will improve the chances of survival regardless of proximity to an urban stroke center.

From January 1, 2019 – December 31, 2019, 8,383 patients were entered into the stroke system, 2,328 of which were ischemic stroke in which 591 received tPA, which is 25 percent. The Alabama Stroke System includes 77 stroke centers, including out-of-state partners. There are currently three designation levels of stroke centers in the stroke system: Stroke Ready Center, Primary Stroke Center, and Comprehensive Stroke Center. As technology improves and stroke data becomes more available, so have the treatment options for certain types of stroke. ADPH continues to work with stroke professionals to develop additional treatment center designation criteria to assist in getting the patient to the appropriate stroke center for rapid evaluation and treatment to decrease stroke morbidity and mortality.

Cardiac System

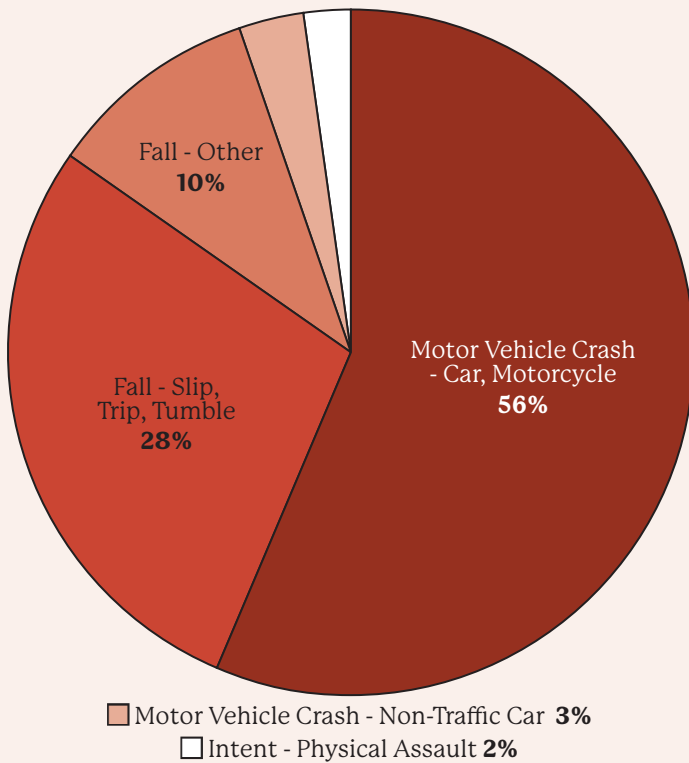
The first component of the Alabama Cardiac System became operational in October after OEMS received a grant to support a Cardiac Arrest Resuscitation to Enhance Survival (CARES) Registry statewide. CARES helps communities measure performance and identify how to improve cardiac arrest survival rates. The cardiac system coordinator will work with EMS providers and hospitals across the state on system entry and data collection. EMS providers can use their data to improve care provided in their communities. OEMS will use the data to improve the quality of care throughout the state.

Alabama EMS for Children (EMSC)

The mission of the Alabama EMSC Program is to prevent and reduce child, youth, and adolescent disabilities and deaths that are the result of severe illness and injury. Several services are available through the program including education for prehospital professionals, continual permanent installation of the EMSC Program into Alabama's EMS system, and assurance that pediatric equipment, according to the American Academy of Pediatrics/American College of Emergency Physicians guidelines, is available on prehospital emergency vehicles that transport children.

EMS Education

In 2019, the Education Section of OEMS drafted new rules establishing more stringent minimal criteria to offer EMS education in Alabama. To ensure compliance, all EMS education programs were required to complete an OEMS accreditation application process. All programs which were not accredited through the Committee on Accreditation for

Figure 20. Five Most Common Causes of Injury in 2019 (Children Age 0 to 18 Years Old)

the EMS Professions were required to undergo a site visit. The site visit teams were made up of an EMS education coordinator from the OEMS and an EMS program director from a noncompeting school. After all applications were reviewed and site visits were concluded, only one program was not accredited. As part of the new minimum education standards, all EMS education programs are also required to maintain at least a 70 percent National Registry of EMTs pass rate (by the third attempt) on a 3-year rotating basis. Minimum education requirements for instructors and program directors were also established. It is hoped that these

Figure 21. Five Most Common Primary Impression Criteria

Primary Impression Type	Count of Events
General Weakness	142,160
Altered Mental Status	39,698
Acute Pain Not Elsewhere Classified	19,799
Respiratory-Respiratory Distress, Acute	18,720
Pain-Chest (Cardiac)	18,720

steps will provide a more fulfilling EMS education experience and ensure stronger entry level prehospital providers.

The office worked with the Office of Primary Care and Rural Health to complete a project with grant funds which focused on educating EMS, fire, law enforcement, and other professional personnel with the recognition, pathophysiology, treatment, and prevention of opioid emergencies. Alabama EMS Region 4 (West) coordinated and facilitated all hands-on activities related to this project.

Alabama Opioid Assistance Project

The Substance Abuse and Mental Health Services Administration has awarded a continuation of the First Responders-Comprehensive Addition and Recovery Act grant for FY2020 to the OEMS. The grant will continue to be used to assist in supplying naloxone to EMS providers licensed in Alabama and to gather research and data on naloxone use statewide. The project continues to provide training and naloxone assistance to EMS and peer recovery support and referral to opioid overdose victims and their families. The OEMS has combined its efforts with the Council on Substance Abuse in Alabama to provide data collection and referral assistance when the patient arrives at the receiving facility. The project has been expanded to include training and educational programs in communities and schools and a marketing campaign deployed for public awareness.

Bureau of Environmental Services

The Bureau of Environmental Services ensures the wellness and safety of Alabamians by regulating food service establishments, milk production, lodging facilities, seafood production, onsite sewage disposal and soil mapping, solid waste disposal, vector control, and indoor air quality and home lead inspections.

Environmental Operations Unit

This unit creates the infrastructure for the bureau by ensuring that the bureau performs proficiently, effectively, and professionally by developing environmental guidelines, policies, and performance standards that measure the efficiency and productivity of the state's environmental programs. The unit also serves as a facilitator for the bureau by providing structured training through workshops, seminars, and conferences for bureau and county personnel. By serving as a "checkpoint" for the bureau, local environmentalists are kept abreast of new and innovative technology, and are provided professional development seminars.

Food, Milk, and Lodging

Food and Lodging Branch

- 52,854 inspections were conducted at food establishments, and 2,944 complaints received from the public concerning food establishments were investigated. Additionally, 313 emergency closure orders were issued.
- 1,003 lodging inspections were conducted, and 376 complaints received from the public concerning hotels were investigated.
- 411 body art facility inspections were conducted, and 36 complaints received from the public concerning body art facilities were investigated.

Milk and Food Processing Branch

- 2,238 samples of milk were reviewed and documented on samples collected for laboratory analysis for bacterial contamination and the presence of antibiotic residue.
- 156 dairy farm inspections and 163 milk processing plant inspections were conducted.
- 711 certificates of free sale were issued for shipments of frozen desserts to overseas markets.

Seafood Branch

- Collected and analyzed 286 water samples in shellfish growing areas of Mobile Bay.
- Conducted 370 inspections of oyster, crab, and other seafood processing plants; 25 samples of oysters or crabmeat were collected for laboratory analysis.

Community Environmental Protection

The Soil and Onsite Sewage Branch's main objective is to coordinate the onsite sewage program in county health departments. The Division of Community Environmental Protection carries out programs to minimize the adverse effects of disposal of sewage and high-strength sewage on human

health and the environment by establishing and enforcing requirements for the design, permitting, installation, approval, and use of onsite sewage treatment and disposal systems.

The branch issued 13,545 permits to install and repair onsite sewage systems; 7,511 were installed and 6,540 were issued an approval for use.

The Solid Waste/Vector Program provides information and education to individuals and communities on the storage and control of solid waste to minimize the threat of a health hazard, nuisance, or harborage for vermin or vectors. This program also permits and inspects solid waste collection vehicles and transfer stations. In FY2019, 2,270 "G" stickers (permits) were issued for solid waste collection vehicles. Of the 32 septic tank manufacturers permitted in Alabama, 11 manufacturers were inspected in FY2019.

Soil Branch

- Individual sites evaluated: 393
- Large flow sites evaluated: 11
- Lots in large flow development: 101
- Training activities conducted: 14
- Training attendees: 447

Indoor Air Quality/Lead Branch

The Indoor Air Quality/Lead Branch provides information and printed materials on issues related to indoor air quality, molds, lead-based paint, and other lead hazards. The primary focus of the branch is to enforce the state regulations promulgated under the Alabama Lead Reduction Act of 1997. These rules require individuals and firms engaged in lead identification and risk assessment and lead-based paint removal of pre-1978 housing and child-occupied facilities to be trained and certified to perform according to established safe work practice standards. Branch personnel also provide support for the Alabama Childhood Lead Poisoning Prevention Program. The branch is the EPA-designated state indoor air contact providing advisory services for the state and those who request it by providing indoor air quality, molds, and asbestos information and printed materials.

Lead Contractor Certification Program activities:

- Certification of firms to conduct lead-based paint activities: 54
- Inspection of lead project sites: 141
- Outreach and education contractors' compliance assistance: 75
- Numbers of state lead regulations violations noted: 100

Childhood Lead Poison Prevention Program activities:

- Lead outreach (inspections and awareness) workshops: 33
- Inspections of homes with cases of children with high blood lead: 60
- Environmental lead sampling of dust, soil, water, and paint chips (approximate): 1,315

Bureau of Family Health Services

Cancer Prevention and Control

Alabama Breast and Cervical Cancer Early Detection Program (ABCCEDP)

The ABCCEDP has provided free breast and cervical cancer screening and diagnostic services for Alabama's underserved women for more than 21 years. Breast cancer screening includes free clinical breast exams and biennial mammograms. Since 2009, a total of 1,279 breast cancers and 1,575 cervical preinvasive and invasive cancers have been diagnosed through ABCCEDP.

Alabama Comprehensive Cancer Program

The Alabama Comprehensive Cancer Control Program facilitates the statewide Alabama Comprehensive Cancer Control Coalition. The coalition is a statewide group of cancer-related organizations and advocates that are responsible for assessing the burden of cancer, determining priorities for cancer prevention and control, and implementing the 2017-2022 statewide comprehensive cancer control plan. The vision is to eliminate the burden of cancer in Alabama. The current 5-year goals are to expand partnerships; decrease the number of Alabamians affected by tobacco; increase the number of Alabamians receiving the HPV vaccination; reduce Alabamians' cancer risk by decreasing their exposure to ultraviolet light; strengthen survivorship, hospice, and palliative care; and increase Alabamians' access to clinical trials. Healthy lifestyle choices such as a proper diet, regular exercise, and participation in checkups and screenings are vital.

Alabama Statewide Cancer Registry

The Alabama Statewide Cancer Registry, a population-based cancer registry, is an information system designed for the

collection, management, and analysis of cancer data. Cancer surveillance serves as the foundation for a comprehensive strategy to reduce illness and death from cancer and enables health professionals to better understand the cancer burden. The registry plays a significant role in disseminating data to aid efforts to reduce the burden of cancer in Alabama.

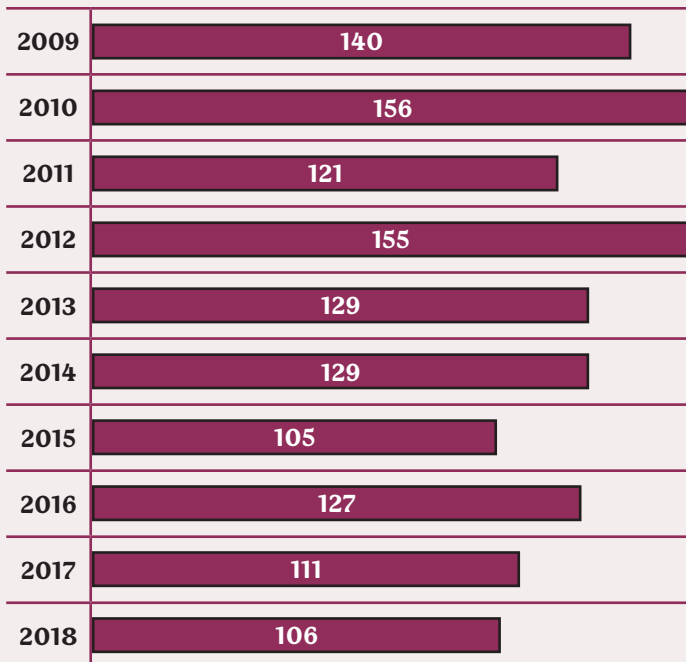
FITWAY Colorectal Cancer Prevention Program

The FITWAY Colorectal Cancer Prevention Program works to increase colorectal cancer screening rates to 80 percent by using evidence-based practice interventions at five clinics targeting low-income and uninsured persons. In addition, over the past year, colorectal cancer state funding was used to screen 169 persons, and prostate cancer state funding was used to screen 1,174 persons.

WISEWOMAN

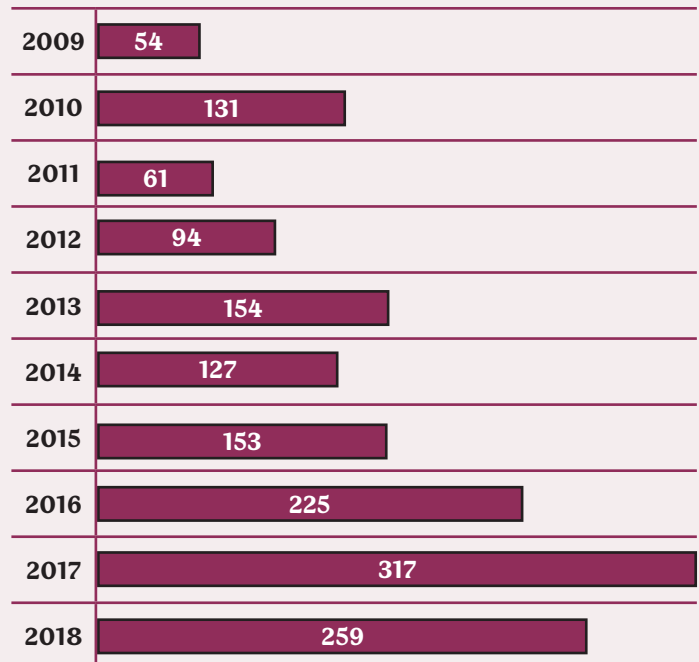
The WISEWOMAN Program strives to help women who participate in ABCCEDP understand and reduce their risk for heart disease and stroke. The program provides services to improve hypertension and promote healthy lifestyles. Since the program began in 2013, more than 5,000 women have participated, receiving access to resources needed to improve their cardiovascular health, such as risk reduction counseling, health coaching, nutrition visits, blood pressure monitors, and support groups. All participants received health coaching, 414 participants received medication support, 899 attended a support group, 387 attended a lifestyle improvement educational class, and 1,805 received nutritional counseling by a registered dietitian. Program efforts led to a statistically significant improvement in hypertension through increased awareness, knowledge, and skills to improve nutrition, physical activity, and reaching and maintaining a healthy weight.

Figure 22. ABCCEDP Diagnosed Breast Cancers by Year*



*2018 is the most recent year for which statistics are available.

Figure 23. ABCCEDP Diagnosed Preinvasive and Invasive Cervical Cancers by Year*



*2018 is the most recent year for which statistics are available.

Figure 24. Alabama Cancer Incidence Rates by Site and Sex, 2018-2017

	MALE		FEMALE	
	Rate	Count	Rate	Count
All Sites	540.4	138,329	402.0	121,297
Bladder	33.2	8,030	7.5	2,377
Brain and Other Nervous System	7.7	1,913	5.6	1,577
Breast	1.4	359	120.9	36,140
Cervix Uteri	-	-	9.0	2,272
Colon and Rectum	52.3	13,170	38.1	11,728
Esophagus	8.3	2,184	1.7	528
Hodgkin Lymphoma	2.7	647	2.1	521
Kidney and Renal Pelvis	23.2	5,973	12.3	3,734
Larynx	8.1	2,171	1.7	520
Leukemia	15.9	3,804	9.8	2,885
Liver and Intrahepatic Bile Duct	11.1	3,002	3.9	1,221
Lung and Bronchus	91.5	23,391	52.2	16,651
Melanoma of the Skin	28.6	7,013	16.8	4,730
Myeloma	8.2	2,068	5.7	1,786
Non-Hodgkin Lymphoma	19.8	4,868	13.6	4,154
Oral Cavity and Pharynx	20.1	5,306	7.2	2,186
Ovary	-	-	11.8	3,551
Pancreas	14.7	3,739	11.1	3,514
Prostate	133.6	36,153	-	-
Stomach	8.9	2,209	4.8	1,491
Testis	4.5	990	-	-
Thyroid	4.8	1,206	13.5	3,547
Uterine (Corpus and Uterus, not otherwise specified)	-	-	19.3	6,015

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates and counts are for malignant cases only with the exception of urinary bladder and groups that contain urinary bladder.

Child and Adolescent Health

The Women's and Children's Health Division was reorganized during FY2019 becoming two separate divisions. The Child and Adolescent Health Division is comprised of the Adolescent Pregnancy Prevention Branch (APPB), Social Work Branch, Alabama Childhood Lead Poisoning Prevention Program (ACLPPP), and the Healthy Child Care Alabama (HCCA) programs.

The APPB works to reduce the incidence of unplanned pregnancies and sexually transmitted infections among teens in Alabama. The APPB utilizes federal grants awarded to the department, as well as partnerships with a number of local and state organizations, to promote healthy decisions among young people. The branch works at the community

level to provide opportunities and resources that promote the overall health and well-being of youth. This approach includes abstinence education, responsibility education, and overall positive youth development.

APPB contains the Alabama Sexual Risk Avoidance Education Program which provides abstinence education to youth in school and community settings through grants to youth-serving organizations; and the Alabama Personal Responsibility Education Program, which provides education regarding abstinence and contraception to youth age 10-19 in community settings through grants to youth-serving organizations as well as high schools. Youth received evidence-based, medically accurate programs within several counties in the West Central District, East Central District, and Southwestern District counties within Alabama.

The Social Work Unit provides case management services to the Newborn Screening (NBS), Lead, and Family Planning programs, women who have experienced an adverse pregnancy outcome, children in need of follow-up dental care, and children in need of specialty services from Children's of Alabama. The unit completed 31,942 referrals in Patient 1st, including 504 lead referrals, 1,117 newborn hearing referrals, and 61 NBS referrals in FY2019. In the Plan First Program, 20,296 unduplicated patients were served. The unit also collaborates on grants with the Department of Human Resources to ensure children enrolled in Early Head Start attend medical and dental appointments. Additional partnership with the Department of Mental Health on Project LAUNCH helps to develop an infrastructure for early childhood mental health services.

ACLPPP is a collaborative effort of the Bureau of Family Health Services, Bureau of Environmental Services, Centers for Disease Control and Prevention (CDC), Association of Maternal and Child Health Programs, and Alabama Medicaid. The program provides public outreach and education to spread awareness about lead poisoning and increase the number of children screened for lead exposure. In addition, the program provides case investigation and case management services to help identify and alleviate sources of lead exposure.

HCCA provides health and safety training and technical assistance to early child care providers throughout the state. In an effort to prevent injury and promote health, 14 nurse consultants work to provide first aid, safety, CPR, infection control, and poison prevention training. During FY2019, programming was provided through 4,325 classes to more than 27,000 provider staff.

Perinatal Health

Maternal and Child Health (MCH)

The MCH Program coordinates federal MCH Title V Block Grant activities. MCH Title V Block Grant services to Children and Youth with Special Health Care Needs (CYSHCN) are administered, through a contract, with the Alabama Department of Rehabilitation Services (ADRS) Children's Rehabilitation Service. The Alabama MCH Program staff continues to change the ways in which the grant is administered to better align with the objectives and goals of the federal block grant transformation. The MCH 3.0 Transformation requires states to select national measures across six population health domains. Also, states must select evidence-based or informed

strategy measures (ESM) for each of the selected national performance measures. Bureau staff work with community, state, and national partners to identify and implement ESMs that improve the health of Alabama's MCH population. In addition to the ESM-focused activities, MCH Program staff also engage in other multi-partner and multi-sector projects.

On September 26-27, 2019, the program, in collaboration with Alabama's Healthy Start grantees and the March of Dimes, hosted the 2019 Infant Mortality Summit. Dynamic speakers provided attendees with tools to address disparities in health and improve community interventions. The latest MCH-led project is the State of Alabama Infant Mortality Reduction Plan. This project involves multiple statewide initiatives, partners from around the state, and support from the National MCH Workforce Development Center. More details on Alabama's MCH priority needs for 2016-2020 and the evidenced-informed strategies to address those needs are found in Figure 25.

MCH Epidemiology

The mission of the MCH Epidemiology Branch is to utilize research and analysis to assess needs to impact public

health policy that will assure the healthiest conditions for the state's MCH populations. To answer a request, provide context for a statistic or topic, staff may have to sometimes perform literary searches and statistical testing, and identify and glean information from key subject matter experts. The branch administers the MCH Title V Block Grant Annual Report and Application, the State Systems Development Initiative Project, and the Pregnancy Risk Assessment Monitoring System (PRAMS) Project. The PRAMS Project is a joint research project between the department and the CDC. On May 1, 2016, the bureau assumed administration of the PRAMS grant from the Center for Health Statistics, which began collecting PRAMS data in 1992. The purpose of this program is to determine why some babies are born healthy and others are not. To do this, a questionnaire asks new mothers about their behaviors and experiences around the time of their pregnancy. Approximately 1,400 Alabama mothers per year are randomly selected from the state birth certificate registry to receive the questionnaire for completion. Responses to the survey are used to help improve the health of mothers and babies in Alabama.

Figure 25. Alabama MCH Priority Needs, NPMs and SPMs by Domain, FY2016-FY2020

MCH Population Domain	National Performance Measures (NPMs)	Priority Needs	Evidence-Based/Informed Strategy Measures (ESMs) <i>Choose at least one per NPM</i>
Women/ Maternal Health	NPM # 1: Well-Woman Visit (Percent of women, age 18 through 44, with a preventive medical visit in the past year)	<ul style="list-style-type: none"> Lack of or inadequate access to comprehensive reproductive and well woman healthcare 	<ul style="list-style-type: none"> ESM- NPM #1: Increase the proportion of women age 12-55 who report receiving a preventive medical visit in the past 12 months by piloting Well Woman in two county health departments by December 2017
	NPM # 13.1: Preventive Dental Visit	<ul style="list-style-type: none"> Inadequate and insufficient health education and outreach pertaining to oral health Inadequate health and dental insurance for all Title V populations 	<ul style="list-style-type: none"> ESM- NPM #13.1.1: Increase the proportion of at-risk pregnant women who report receiving a preventive dental visit during pregnancy by piloting the First Steps Program ESM- NPM #13.1.2: Increase the proportion of at-risk pregnant women who are educated about the importance of receiving preventive dental care during pregnancy and assist with linking Medicaid insured to needed dental services by piloting the First Steps Program ESM- NPM #13.1.1: Increase the proportion of at-risk pregnant women who report receiving a preventive dental visit during pregnancy by piloting the First Steps Program ESM- NPM #13.1.2: Increase the proportion of at-risk pregnant women who are educated about the importance of receiving preventive dental care during pregnancy and assist with linking Medicaid insured to needed dental services by piloting the First Steps Program
Perinatal/ Infant Health	NPM # 5: Safe Sleep (A. Percent of infants placed to sleep on their backs, B. Percent of infants placed to sleep on a separate approved sleep surface, C. Percent of infants placed to sleep without soft objects or loose bedding) NPM #3: Risk-Appropriate Perinatal Care (Percent of very low birth weight [VLBW] infants born in a hospital with a Level III+ Neonatal Intensive Care Unit [NICU])	<ul style="list-style-type: none"> Lack of awareness of and trust in safe sleep recommendations Desire to maintain and strengthen regionalized perinatal care 	<ul style="list-style-type: none"> ESM - NPM #5: To conduct the Direct on Scene Education Train-the-Trainer Program to first responders in order to reduce Alabama's high rate of unsafe sleep-related deaths in infants less than 1 year of age ESM - NPM #3: To improve the system of perinatal regionalization statewide in order to increase the number of VLBW deliveries at an appropriate level of care facility

Child Health	<p>NPM #6: Developmental Screening (Percent of children, age 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year)</p> <p>SPM #2: Percent of Alabama Medicaid-eligible children who receive a blood lead screening test at 12 and 24 months of age</p> <p>SPM #4: Number of school districts assessed regarding current mental health services</p> <p>NPM # 13.2: Preventive Dental Visit</p>	<ul style="list-style-type: none"> • Low rates of preventive health and developmental screening for children • Inadequate and insufficient health education and outreach pertaining to oral health • Inadequate health and dental insurance for all Title V populations 	<ul style="list-style-type: none"> • ESM - NPM #6: To establish an agreement with the Alabama Partnership for Children's Help Me Grow Program to utilize its online ASQ-3 assessment tool so that parents can complete developmental screens prior to child health visits at county health departments • ESM - SPM #2: N/A • ESM - SPM #4: N/A • ESM 13.2.1: Increase the proportion of infants and children, age 1 through 17 years, who report receiving a preventive dental visit in the past 12 months by piloting the Home by One Program
Adolescent Health	<p>NPM # 10: Adolescent Well-Visit (Percent of adolescents, age 12 through 17, with a preventive medical visit in the past year)</p> <p>SPM #3: Develop a comprehensive Adolescent Health Program Strategic Plan</p> <p>SPM #4: Number of school districts assessed regarding current mental health services</p> <p>NPM # 13.2: Preventive Dental Visit</p>	<ul style="list-style-type: none"> • Low rates of preventive health and developmental screening for adolescents • Inadequate and insufficient health education and outreach pertaining to oral health • Inadequate health and dental insurance for all Title V populations 	<ul style="list-style-type: none"> • ESM - NPM #10: Partner with the University of Alabama at Birmingham (UAB) Leadership and Education in Adolescent Health (LEAH) Project to provide training and clinical practice quality improvement on youth-centered care to clinicians and other clinic staff using the Bright Futures model • ESM - SPM #3: N/A • ESM - SPM #4: N/A • ESM 13.2.1: Increase the proportion of infants and children, age 1 through 17 years, who report receiving a preventive dental visit in the past 12 months by piloting the Home by One Program
Children with Special Health Care Needs (CSHCN)	<p>NPM # 11: Medical Home (Percent of children with and without special healthcare needs, age 0 through 17, who have a medical home)</p> <p>SPM #1: Percent of CYSHCN and their families who report that they share in decision making and partnerships with their healthcare providers</p> <p>NPM # 12: Transition (Percent of adolescents with and without special healthcare needs, age 12 through 17, who received services necessary to make transitions to adult health care)</p>	<ul style="list-style-type: none"> • Lack of or inadequate access for CSHCN to family-centered, coordinated, ongoing comprehensive care within a medical home • Lack of or inadequate access to services necessary for CSHCN to transition to all aspects of adult life 	<ul style="list-style-type: none"> • ESM - NPM #11: 1. Percent of enrollees in the State CSHCN Program with a comprehensive plan of care. 2. Percent of providers receiving education/training about family-centered care • ESM - SPM #1: N/A • ESM - NPM #12: Percent of YSHCN enrolled in the State CSHCN Program with a transition plan in place

The branch also provides support to the following programs within the bureau: the Alabama State Perinatal Program, which includes the Fetal and Infant Mortality Review Program and the Maternal Mortality Review Program; the Family Planning Program; the Women's Health Medical and Social Work programs; the Childhood Lead Program; the NBS and Newborn Hearing Screening programs; and the Alabama Zika and Birth Defects Surveillance Program, which is currently under development. The branch also provides support to the State of Alabama Infant Mortality Reduction Plan Workgroup as well as the Pregnancy Outcomes Team of the department's Strategic Planning Team.

NBS

The Alabama NBS Program is a comprehensive and coordinated system encompassing education, screening, follow-up, diagnosis, evaluation, and management of certain genetic disorders. In 2019, Alabama screened for 31 recommended disorders including the bloodspot screening, newborn hearing screening, and pulse oximetry screening to detect critical congenital heart disease. The Alabama BCL provides blood analysis of newborn screening specimens, and manages a web-based system, Secure Remote Viewer, which allows medical providers to access newborn screening results online.

NBS allows treatment to be initiated within the first few weeks of life, preventing some of the complications associated with disorders. Early diagnosis may reduce morbidity, death, intellectual disability, and other developmental disabilities. The program works in partnership with pediatric subspecialists throughout the state to ensure all babies identified with presumptive positive results receive appropriate follow-up. The program's subspecialists participate in provider education webinars and on the Alabama NBS Advisory Committee. Additionally, six community-based sickle cell organizations provide counseling services and follow-up for children identified with sickle cell disease or trait.

The Alabama Early Hearing Detection and Intervention Program, Alabama's Listening, ensures that all infants receive a hearing screening prior to hospital discharge, and that they are referred for further testing and intervention if they do not pass the screening. The Alabama's Listening Program is federally funded. The goal of the program is to follow the guidelines of the Joint Committee on Infant Hearing, which are screening by 1 month of age, diagnostic hearing evaluation by 3 months of age, and referral to early intervention by 6 months of age to ensure optimal language acquisition, academic achievement, and social and emotional development.

During 2019, the Alabama NBS Program received approximately 3,000 laboratory referrals and identified 168 infants with an NBS condition.

Oral Health

The Oral Health Office implemented several initiatives in FY2019. The first Alabama State Oral Health Plan, an instrument that will provide guidance to navigate toward

optimal oral health for all Alabamians, reached its final draft stage. In anticipation of an early FY2020 release, the document is to serve as a benchmark for treatment determinants and future progress in addressing needs.

Activities included the following:

- In conjunction with National Children's Dental Health Month, the office conducted the Second Annual "Share Your Smile

Figure 26. Newborn Screening Primary Disorder Confirmed, 2019

2019 NBS Core Disorders	Number of Lab Referrals, Initial Failed Hearing Results, and Failed Pulse Oximetry Results Reported to the Follow-up Program	Number of Confirmed Diagnoses	Number Referred for Intervention/ Specialty Care
3-Hydroxy-3-methylglutaric aciduria	0	0	0
3MCC	4	0	0
Argininosuccinic Aciduria	0	0	0
Beta Ketothiolase Deficiency	0	0	0
Biotinidase Deficiency	3	1	1
Carnitine Uptake Defect (CUD)	61	0	0
Citrullinemia Type 1	26	0	0
Classic Galactosemia	32	2	2
Classical Phenylketonuria (PKU)	25	3	3
Congenital Adrenal Hyperplasia	20	4	4
Congenital Hypothyroidism	41	41	41
Critical Congenital Heart Disease	4	1	1
Cystic Fibrosis	234	11	11
Glutaric Acidemia Type 1	8	0	0
Hearing Loss	2,210	52	51**
Holocarboxylase Synthase Deficiency	0	0	0
Homocystinuria	63	0	0
Isovaleric Acidemia	2	0	0
LCHAD (Long-chain)	2	0	0
Maple Syrup Urine Disease	18	0	0
MCADD (Medium-chain)	10	3	3
Methylmalonic Acidemia (Cbl A, B)*			
Methylmalonic Acidemia Mutase*	38	0	0
Propionic Acidemia*			
SCID (Testing began 10/1/2018)	67	0	0
S Beta Thalassemia	2	2	2
SC Disease	15	15	15
SS Disease	32	32	32
Trifunctional Protein Deficiency	0	0	0
Tyrosinemia Type I	99	0	0
VLCAD (Very Long Chain)	2	1	1
TOTALS	3,018	168	167

*Same analyte used to test. **One infant moved out of state, unable to determine referral to early intervention

With Alabama” smile contest in February, quadrupling the number of entrants over the first year. The contest is designed to bring attention to the importance of preventive dental visits for children age 1-17. The contest garnered the attention of the Family Voices organization, which plans to share this strategy as a model for other state Title V programs.

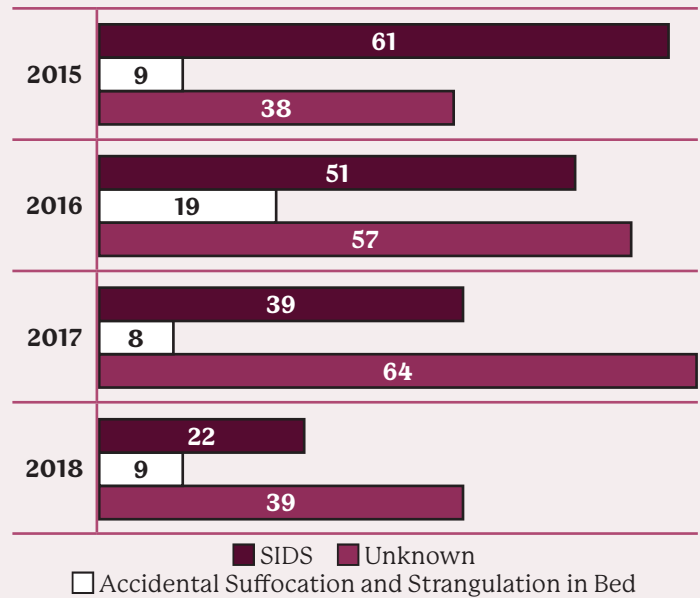
- Executed a grant to HandsOn River Region to support the Pay It Forward Program, a new program to help Montgomery-area citizens who have no dental insurance get the dental care they need and contribute to the community at the same time. Those who receive dental care through the program donate hours of volunteer service in return for dental care at participating dental offices.
- In observance of April as Oral Cancer Awareness Month, collaborated with the University of South Alabama Mitchell Cancer Institute and more than 16 statewide partners in an awareness campaign called “WATCH YOUR MOUTH,” in which Coach Pat Sullivan chronicled his years-long battle with oral cancer. Over 3,000 wristbands, 10,000 self-exam cards, 6,000 HPV vaccine educational flyers, and infocards were distributed statewide as well as ads promoting the HPV vaccine in nine magazines. The office direct-mailed information and enrollment forms to all 2,591 licensed dentists statewide promoting the department’s Tobacco Quitline.
- In collaboration with the American Academy of Pediatrics, through a grant provided by DentaQuest, participated in the Brush, Book, Bed Program designed to promote predictable bedtime routines for children. Twelve pediatric offices were selected to receive 500 oral health kits and a book, “Pony Brushes His Teeth.” Several ADPH programs have used the program as a model.
- Partnered with the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) for the second year to provide oral health kits and educational materials to 2,180 4-year-old WIC recipients in Alabama Black Belt counties.
- Distributed more than 15,000 oral health kits statewide for events including health fairs, Early Head Start/Head Start children, natural disaster victims, school-based programs, churches, and pediatric nursing homes, among others.
- Oversaw the collection of water samples from Alabama’s water plants to monitor fluoridation levels and acted as a liaison to verify the calibration of the water plants’ equipment to guarantee water plants are supplying water to the community at the optimally fluoridated level. A newly designed collection method, patterned after the CDC-approved model, was adapted to the Alabama process. Water plant operators will be responsible for collection of samples and testing the fluoride levels prior to submitting the remaining sample to the State Laboratory for comparison.
- Awarded yearly fluoridation awards for surface water fluoridation quality, ground water fluoridation quality, and 50-year awards in conjunction with the CDC.

Perinatal Program

State Perinatal Program

The purpose of the State Perinatal Program is to identify and recommend strategies that will effectively decrease maternal and infant morbidity and mortality, improve maternal and infant health through a system of regionalized care, and

Figure 27. Number of SUIDs in Alabama from 2015-2018



provide leadership in establishing program priorities. Program activities include fetal, infant, and maternal mortality reviews; education to reduce risk factors associated with Sudden Unexpected Infant Death (SUID); promotion and education of the Alabama Perinatal Regionalization System Guidelines; support and promotion of breastfeeding; participation on local, state, and national committees to reduce maternal and infant mortality; provision of outreach education to healthcare providers and the public; and continuing the initiatives of the State of Alabama Infant Mortality Reduction Plan. In December 2019, the latest infant mortality rate of 7.0 infant deaths per 1,000 was released. This is the lowest rate in Alabama history. A 37 percent decrease was noted in SUID which accounted for 17.3 percent of the total infant mortality rate in 2018, see Figure 27.

Women’s Health

Family Planning Program goals include decreasing unintended pregnancies and assisting clients to plan and space the time between pregnancies. In FY2019, the program provided education and counseling, medical examinations, laboratory tests, and contraceptive supplies to approximately 58,000 individuals of reproductive age in 65 of Alabama’s 67 counties (excluding Mobile and Jefferson counties). The Family Planning Program launched two significant initiatives in FY2019 that greatly expanded client access to highly effective contraception and medical care: nurse practitioners received training to insert intrauterine devices, making all hormonal contraceptive methods available in every county. Additionally, Family Planning Program physicians implemented colposcopy clinics in each ADPH district in order to meet a significant client need for this critical diagnostic procedure.

The Alabama Office of Women’s Health (OWH) provides statewide leadership and coordination to promote the health of women and girls through policy, advocacy, education, and partnership. The OWH achieves its mission and vision by educating health professionals, and motivating behavior

change in consumers through the dissemination of health information. Two major initiatives in 2019 from the OWH included continued outreach for the prevention/awareness of Neonatal Abstinence Syndrome (NAS) by hosting/coordinating the Opioid Misuse in Women/NAS Taskforce meetings and assisting with the continued implementation of a Well Woman Program in six Alabama counties: Butler, Dallas, Macon, Montgomery, Russell, and Wilcox.

The Well Woman Program continues to be included as a part of the State of Alabama Infant Mortality Reduction Plan; and focuses on women of childbearing age to improve their overall health before becoming pregnant and after the delivery of newborns. The program allows for women to receive a preventative wellness screening, opportunity to participate in behavioral change programs regarding chronic diseases, food choices, physical activity, and provides referrals for smoking cessation.

Women, Infants, and Children Program

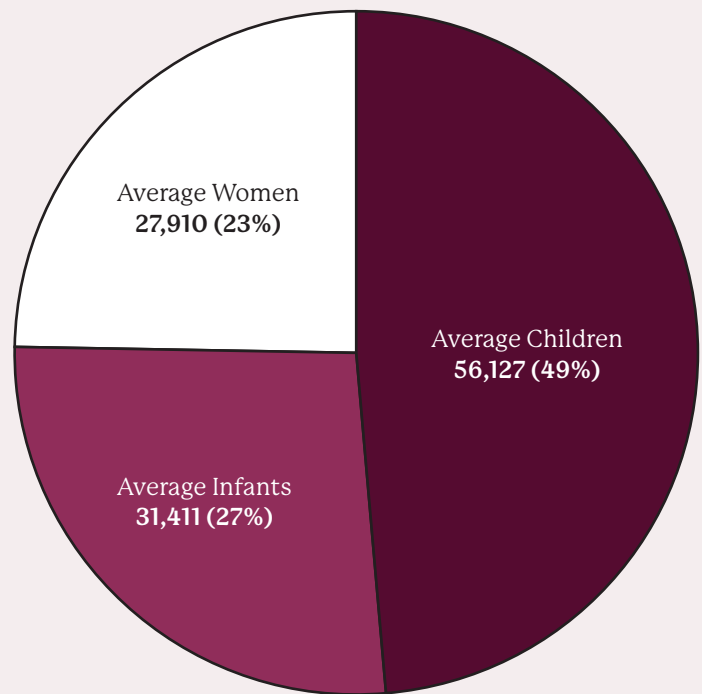
WIC serves women who are pregnant, recently had a baby, or are breastfeeding; infants; and children up to the age of 5

Figure 28. WIC Redemptions by District, FY2019

Districts	FY2019 Total Redemptions
East Central	\$13,964,006.50
Jefferson	\$10,566,054.68
Mobile	\$10,199,529.18
Northern	\$18,966,660.03
Northeastern	\$13,303,066.74
Southeastern	\$8,813,454.70
Southwestern	\$8,172,371.22
West Central	\$8,586,972.63
Total	\$92,572,115.68

years. To qualify to receive WIC benefits, the applicant must meet income guidelines and have at least one nutrition risk documented. Benefits provided by the WIC Program include quality nutrition education and services, breastfeeding promotion and support, referrals to maternal and child healthcare services and other assistance agencies, and supplemental foods prescribed as a monthly food package. Supplemental foods include fresh fruits and vegetables, whole grains, dairy, protein sources, juice, infant foods and formula, as well as other specialized formulas ordered by physicians. During 2019, Alabama WIC transitioned from paper food instruments to electronic benefits which provide a better shopping experience for WIC families.

Figure 29. Average Participation for WIC, 2019



Office of Field Operations

Clinical Management and Practice

Clerical

Public health clerical staff provide professional assistance in the daily operations of county health departments and in the daily functions of the districts and central office. Staff serve in a variety of roles including front desk receptionist, intake clerk, home health clerk, and office manager. Approximately 338 administrative support staff are employed by the department, and each is vital to the agency's ability to meet the needs of the citizens of Alabama.

Nursing

The mission of Public Health Nursing is to assure conditions in which individuals, families, and communities can be healthy utilizing the unique expertise of public health nurses to assess, plan, and implement programs which promote health and prevent disease. The department employs 726 nurses who provide family planning, child health, home health, and preventive and treatment services for disease control.

Public health nurses are active in the community through involvement in health fairs and other educational opportunities. ADPH is an approved provider of continuing education by the Alabama State Nurses Association. In 2019, over 3,638 participants earned 146 continuing education units through 44 programs that were offered.

Social Work

Social work staff serve as members of a multi-disciplinary team of professionals, skilled in using social work values, knowledge, and community resources to promote positive health outcomes, while respecting personal choice and promoting the health and well-being of individuals, groups, and communities. Public health social workers act as liaisons within their respective communities, educating and advocating for changes to improve poor outcomes related to social determinants of health.

Public Health Social Work is an approved provider of Social Work Continuing Education by the Alabama Board of Social Work Examiners, and during 2019 provided social work continuing education credit for more than 60 programs both onsite and via satellite.

The department employs approximately 120 social workers who provide care in county health department clinics, patient homes, and the local community. They are responsible for programmatic oversight in the county, district, and central office. Social workers provide direct service to a multitude of Alabamians in a variety of settings and programs within the department including Adolescent Abstinence Education, Alabama Personal Responsibility Education Program, CHIP, Diabetes Self-Education, Elevated Lead, HIV Care Coordination, Home Health, Licensure and Certification, Maternity Care Coordination, Metabolic

Care Coordination, Newborn Hearing Screening, Prenatal Education, STD, Suicide Prevention, Telehealth, TB, Well Woman, and Wisewoman, and serve on several committees at the local level using the Collective Impact framework to address deeply entrenched and complex social problems that negatively impact the communities of Alabama.

Community Affairs

The department established the Office of Community Affairs in 2015 to address healthcare transformation and its impact on communities, programs, and resources. Better health for populations, better quality care for individuals, and lower per capita costs was the framework developed for healthcare transformation.

The office works to identify ways the department can partner with other community entities to ensure poor social determinants of health and risky health behaviors are addressed by connecting programs, populations, and resources. The office focuses on working across multiple organizations and through stakeholders to address the complex health concerns of Alabama citizens. These include enhancing appropriate access to care through strengthening transportation policy and supporting telehealth, especially for residents of rural areas.

Electronic Health Record (EHR)

EHR is continuing to implement programs and enhancements to improve patient care at county health departments. The patient portal will begin in April 2020 which will allow ADPH patients full access to view clinical encounters, laboratory orders, and other procedures provided to them at each visit. The department has full HL7 connectivity with ImmPRINT in 23 county health departments, and rollout will continue with full connectivity in all county sites by summer 2020.

Telehealth

Telehealth is a statewide program with 65 county health departments equipped with telehealth carts. Collaborating with 15 healthcare agencies, ADPH staff facilitate services such as behavioral health, cardiology, diabetes education, genetic counseling, HIV/AIDS, maternal-fetal medicine, nephrology, and neurology. Telehealth equipment is also utilized by ADPH staff for meetings and training events.

The Telehealth office manages several grants that provide for the deployment of the carts and specialty equipment, and funding for county health department staff, primarily nurses and social workers, who are trained as "telepresenters" to operate the equipment during the telehealth appointments. ADPH continues to improve and increase the usage opportunities of the telehealth carts with new equipment such as new Bluetooth stethoscopes and other peripheral devices as funding becomes available.

Bureau of Financial Services

The Bureau of Financial Services provides support to the department through financial and cost accounting management. Services rendered in support of the department and its goals include accounts receivable, payroll, accounts payable, purchasing, budgeting, grant accounting, production planning, and administrative support.

In FY2019, Financial Services managed the department's \$751 million budget using 314 internal budgets interfaced with 10 Executive Budget Office spending plan activities, and 203 internal funds interfaced with 12 State Comptroller's funds in the State Treasury. The bureau managed a total of more than 100 federal grants with a value in excess of \$521 million and 614 contracts totaling over \$73.6 million.

Included in the federal grants are WIC gross food outlays of \$94.4 million including \$33.2 million received from the department's infant formula rebate contract.

The bureau provided fiscal agent services in the form of payroll, procurement, accounts payable, contract payment processing, and budget management to the Family Practice Rural Health Board and the Board of Medical Scholarship Awards.

Additionally, the bureau provides all accounting services for the Alabama Public Health Care Authority (the authority). The State Committee of Public Health authorized the department to establish the authority as a public corporation in 1995. The mission of the authority is to build, furnish, and

Figure 30. Public Health Funding History

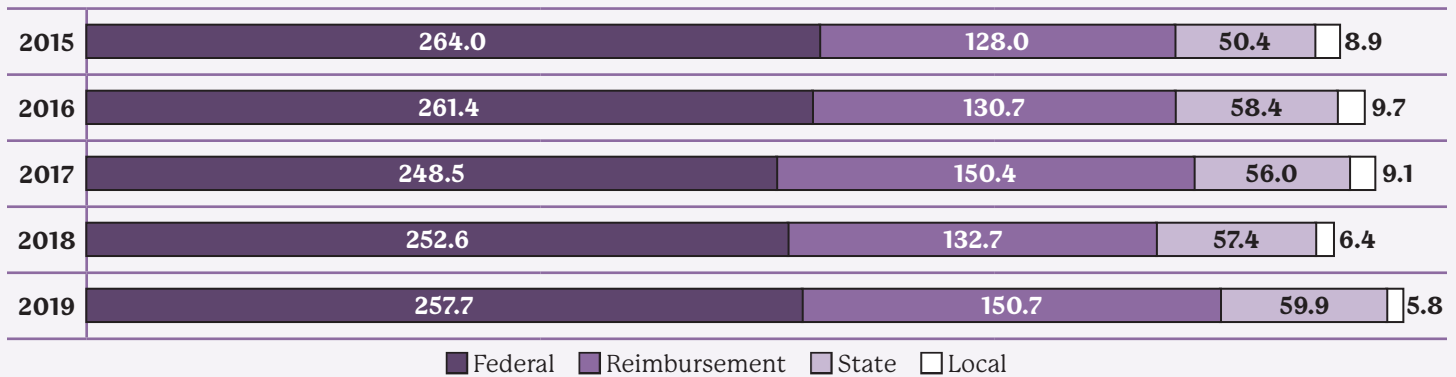


Figure 31. State Appropriations – Public Health

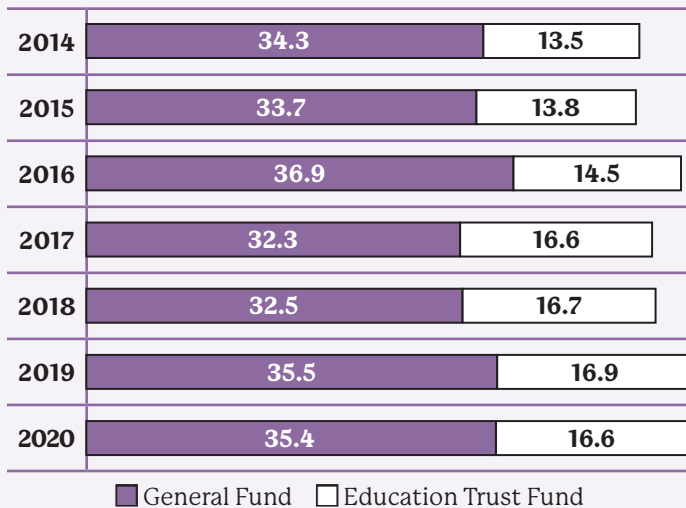
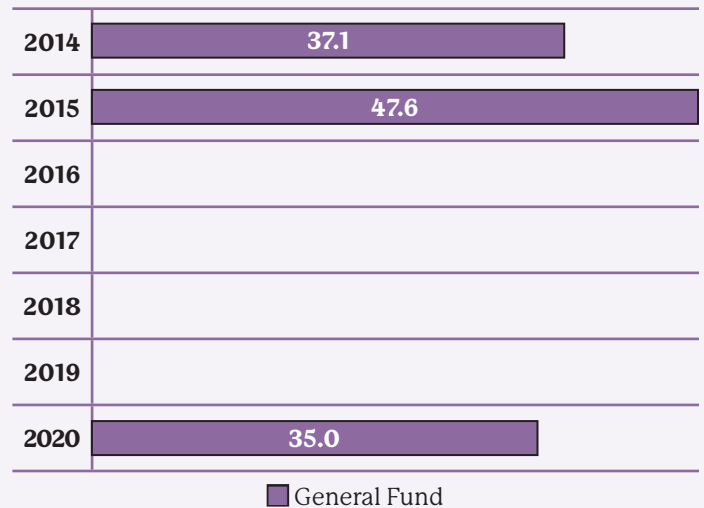


Figure 32. State Appropriations - CHIP



equip public health facilities throughout Alabama.

The authority has completed the Phase I, II, and III building programs, which included constructing and renovating 66 facilities, and continues to propose and develop solutions for additional public health buildings and equipment needs.

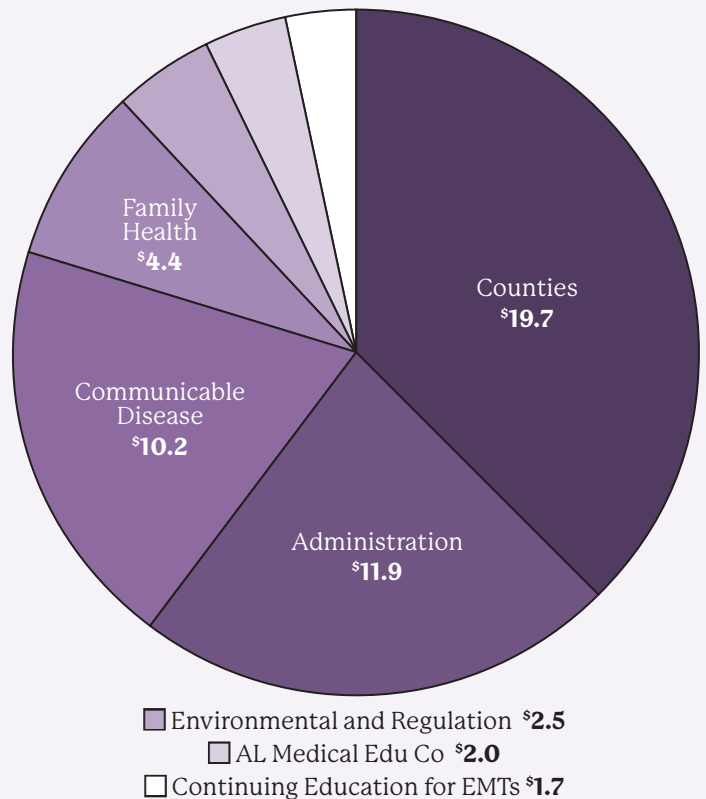
A Phase IV building program is ongoing and encompasses the following projects. Construction continues on a new state laboratory with adjacent training center, which includes office space. The projects are expected to be completed in the first quarter of 2020.

The authority manages the Alabama Public Health Capital Maintenance Trust Program, which provides funding for a comprehensive, coordinated preventative maintenance improvement and replacement program for public health facilities in Alabama. The authority's construction management firm provides technical assistance, advice, and program monitoring. The program spent \$1,156,317 during FY2019 to provide the following services:

- Periodic facility inspections to identify deficiencies, repairs, and maintenance needs.
- Maintenance contracts for heating, ventilation, air conditioning systems, fire alarms, and fire sprinkler systems.
- Roof systems maintenance/repair and a full range of other maintenance repair expenditures and renovations to maintain public health facilities in good working order.

Figure 33. Use of State Funds – FY2019

General Fund and Education Trust Fund only (In millions)



Bureau of Health Provider Standards

The mission of the Bureau of Health Provider Standards is to improve quality of care and quality of life for healthcare consumers and to reduce adverse outcomes through the process of licensure inspection and certification of healthcare providers.

The bureau consists of several units that include, but are not limited to Assisted Living, Medicare Other, Long Term Care, and Clinical Laboratory Improvement Amendment (CLIA). Each unit serves only in its specialty and performs license inspections, unannounced surveys for complaints and compliance, and certification surveys when required. Provider Services processes applications for initial licensure, certification, change of ownership, annual license renewal, and changes in provider information.

Medicare Other

The Medicare Other Unit completed all of the FY2019 Centers for Medicare and Medicaid Services (CMS) workload. The Medicare Other Unit has moved the surveyors' base location to the county health department closest to their home. This transition has increased the surveyors' productivity and morale.

Long Term Care

The Long Term Care Unit successfully completed all of the required FY2019 CMS workload. The statewide average interval requirement between consecutive standard health surveys must be 12.9 months or less. The average for FY2019 was 11.4 months for surveying 227 providers. Surveyors are required to pass a federally mandated surveyor minimum qualifications test. During FY2019, nine surveyors had the opportunity to take this test, with all successfully completing this requirement.

Assisted Living Facilities (ALFs)

The ALF Unit completed 103 ALF surveys and 40 Specialty Care Assisted Living Facility (SCALF) surveys for a total of 143 surveys. Two hundred fourteen complaints were investigated. Three facilities had probational licenses, and there were 191 licensed ALFs and 101 licensed SCALFs. Three facilities (one ALF and two SCALFs) voluntarily closed in lieu of adverse licensure action. On April 6, 2019, new State Board of Health rules for ALFs and SCALFs went into effect, culminating 2 years of collaboration between the department and a rules committee. These changes will facilitate providers in obtaining and maintaining compliance in licensed facilities.

CLIA Laboratory

CLIA serves to assess how clinical laboratories monitor their pre-analytic, analytic, and post-analytic systems to ensure the quality of testing provided for the patients/clients. Although CLIA's objective is to determine a laboratory's compliance with the regulation, CLIA seeks to aid clinical laboratories in improving patient care by promoting an educational survey process. Although the CLIA Laboratory Unit is operating short of at least one full-time surveyor, the unit succeeded in surveying all laboratories for FY2019 prior to the expiration dates of their certificates. The regional office representative conducted three federal monitoring surveys for the two CLIA surveyors and found no deficits in the surveyors' performance. In April, the CLIA surveyors attended a mandatory annual continuing education consortia.

Provider Services License and Certification

Licensure: The Provider Services License Unit has continued to process applications for initial facility licensure and license amendments. There were 114 licenses processed for FY2019.

Certification: There are 1,225 certified facilities and agencies in Alabama. Provider categories with the most significant change were rural health clinics (5 percent increase), rehabilitation centers (11 percent increase), and end stage renal disease treatment centers (3 percent increase).

Figure 34. Summary of Licenses and Investigations

Facility Type	Total Complaints Investigated	Facilities with Probational Licenses
Abortion Centers	0	0
ALFs/SCALFs	214	3
Ambulatory Surgical Centers	0	0
End Stage Renal Disease Treatment Centers	5	1
Home Health Agencies	2	0
Hospitals	16	0
Hospice Agencies	2	0
Nursing Homes	189	1

Figure 35. Licensed Health Care Facilities and Agencies

Abortion or Reproductive Health Centers	5
Ambulatory Surgical Centers	46
ALFs	194
SCALFs	101
Cerebral Palsy Centers	1
End Stage Renal Disease Treatment Centers	183
Freestanding Emergency Departments	4
Hospice Agencies	183
Hospitals	118
Independent Clinical Laboratories	415
Independent Physiological Laboratories	64
Nursing Homes	232
Rehabilitation Centers	30
Sleep Disorder Centers	18
Total	1,594

Center for Health Statistics

The Center for Health Statistics operates the vital records system and collects and tabulates health-related statistical data for the state of Alabama. The center files, stores, and issues certified copies of vital records including birth, death, marriage, and divorce certificates for events that occur in Alabama. In addition to registering vital records and issuing certified copies, the center corrects and amends birth and death records and creates new certificates after legal actions. The center consists of the following divisions: Administrative Services, Quality Assurance and Registration, Record Services, Special Services, and Statistical Analysis.

An automated vital records system called ViSION, or Vital Statistics Image Oriented Network, allows vital records to be issued in all Alabama county health departments. Customers can obtain vital records from the center through county health departments usually within 30 minutes or less. Customers may also order records over the Internet, by telephone for next business day delivery, or by regular mail.

More than 160,100 vital records were registered with the center in 2019. All birth records are registered electronically, and

approximately 92 percent of divorce and 94 percent of death certificates are registered electronically. The center continues to increase the number of death records registered through the Electronic Death Registration System (EDRS), which allows families to obtain certified copies more quickly. The addition of Supplemental Medical Certification to the EDRS now allows medical certifiers to electronically make changes, corrections, or additions to the cause of death information on a death certificate. Upon filing of an electronic supplemental medical certification, an amended death certificate is almost immediately available, compared to the 2- to 3-week processing time of a paper supplemental medical certification form.

The center's Statistical Analysis Division conducts studies and provides analyses of natality, pregnancy, general mortality, infant mortality, causes of death, marriage, divorce, and other demographic and health-related data for public health policy and surveillance. Results are distributed through numerous publications, reports, presentations, special tabulations, and the department's website to the public, news media, researchers, government or private agencies, and various units within the department.

Figure 36. Certified Copies of Vital Records Issued, 2019

The center issued 719,167 certified copies of vital records through county health departments, mail, Internet, and operator-assisted requests.

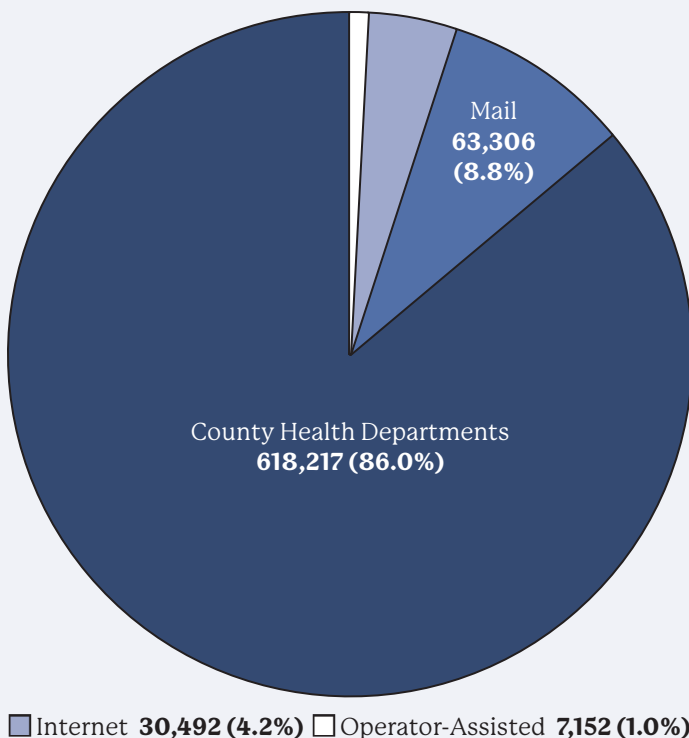


Figure 37. Electronic Death Registration, 2019

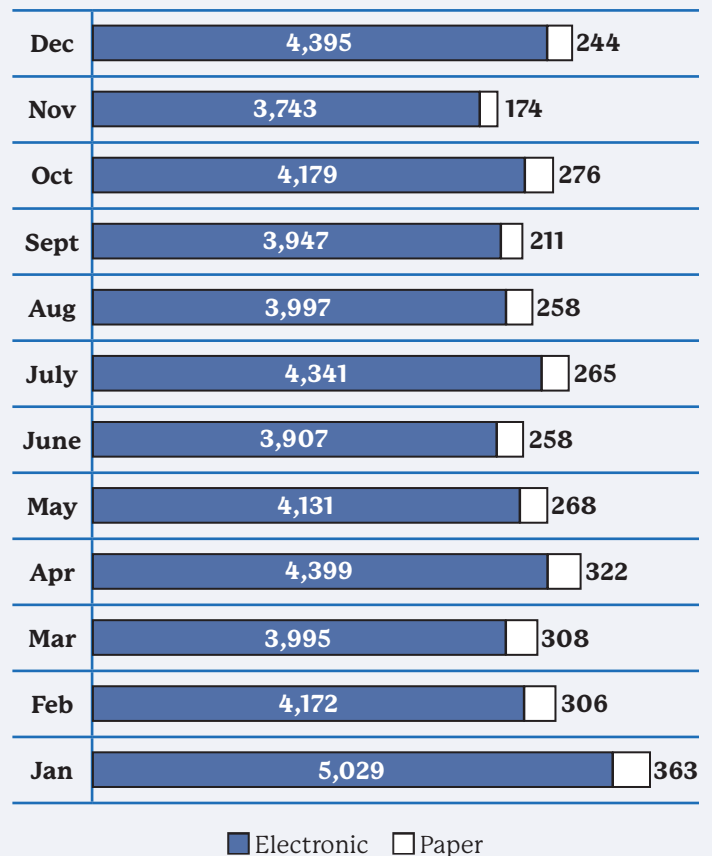


Figure 38. Vital Statistics, 2018

	Number	Rate/Percent	
Births	57,754	11.8	(Per 1,000 Population)
Births to Teenagers	3,961	12.9	(Per 1,000 Females Aged 10-19 Years)
Low Weight Births	6,192	10.7	(Percent of All Live Births)
Births to Unmarried Women	26,991	46.7	(Percent of All Live Births)
Deaths	54,357	11.1	(Per 1,000 Population)
Marriages	33,057	6.8	(Per 1,000 Population)
Divorces	18,200	3.7	(Per 1,000 Population)
Induced Terminations of Pregnancy	7,381	7.8	(Per 1,000 Females Aged 15-44 Years)
Infant Deaths (Neonatal + Postneonatal)	405	7.0	(Per 1,000 Live Births)
Neonatal Deaths (0-27 days of life)	252	4.4	(Per 1,000 Live Births)
Postneonatal Deaths (28-364 days of life)	153	2.6	(Per 1,000 Live Births)
Total estimated state population is 4,887,871.			

Figure 39. Alabama's Leading Causes of Death, 2018

Cause of Death	Rank	Number	Rate ¹	Population
Total		54,357		4,887,871
Heart Diseases	1	13,473	275.6	
Malignant Neoplasms	2	10,630	217.5	
Chronic Lower Respiratory Diseases	3	3,595	73.5	
Cerebrovascular Diseases	4	3,088	63.2	
Accidents	5	2,682	54.9	
Alzheimer's Disease	6	2,616	53.5	
Pneumonia and Influenza	7	1,269	26.0	
Diabetes Mellitus	8	1,176	24.1	
Nephritis, Nephrotic Syndrome, and Nephrosis	9	1,037	21.2	
Septicemia	10	1,024	20.9	
Suicide	11	823	16.8	
Chronic Liver Disease and Cirrhosis	12	760	15.5	
Parkinson's Disease	13	571	11.7	
Homicide	14	567	11.6	
Essential (Primary) Hypertension	15	563	11.5	
All Other Causes, Residual		10,483		

¹Rate is per 100,000 population.

Office of HIV Prevention and Care

The mission of the Office of HIV Prevention and Care (OHPC) is, in collaboration with community partners, to reduce the incidence of HIV infections, increase life expectancy for those infected, and improve the quality of life for persons living with or affected by HIV.

Early in 2019, 48 counties nationwide, along with San Juan, Puerto Rico; Washington, D.C.; and 7 states including Alabama were identified as priority HIV high burden regions to launch a new national initiative. On June 7, 2019, the State Health Officer, along with invited community and public health partners, welcomed Robert R. Redfield, M.D., director of the Centers for Disease Control and Prevention. Dr. Redfield's 1-day visit was part of his multi-state tour to announce a new public health campaign and 10-year funding strategy, Ending the HIV Epidemic: A Plan for America (ETHE), endorsed by President Donald Trump with planned multi-year increased funding appropriations to highly impacted communities nationwide.

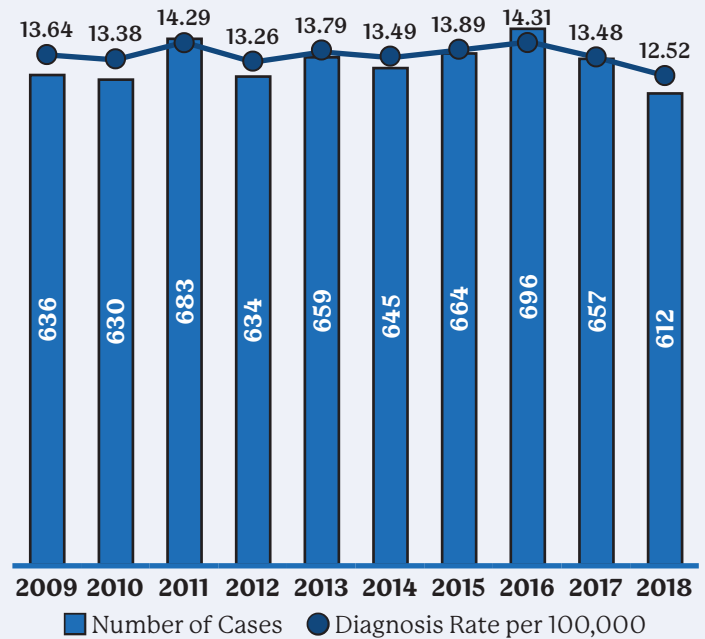
On October 1, 2019, the HIV Division, no longer a part of the Bureau of Communicable Disease, became the new OHPC which now organizationally reports directly to the State Health Officer. The State Health Officer's experience in infectious diseases coupled with the high-profile community engagement and funding priorities of the new initiative prompted public health to scale up program activities and actions which will contribute to reaching the goals of reducing new HIV infections by 75 percent in 5 years and by 90 percent by 2030. New and existing community partnerships will focus on policy; proven public health strategies; and biomedical, behavioral, and structural interventions to ramp up the Alabama response to ETHE.

Nationally, designated jurisdictional public health departments submitted preliminary ETHE plans on December 31, 2019. Alabama's award amount for community engagement planning in year one was \$375,000.

Alabama continues to experience an HIV epidemic of moderate magnitude when compared to other states. A cumulative total of 22,314 HIV infections have been diagnosed among Alabama residents since reporting began in 1982; as of December 31, 2019, 14,742 individuals in Alabama have been diagnosed with HIV.

As of December 31, 2019, the OHPC serves 3,600 clients through the Alabama Drug Assistance Program (ADAP). Of

Figure 40. HIV/AIDS Cases, Alabama 2009-2018



that number, 330 uninsured individuals received ADAP-funded medications; 3,184 individuals were provided ADAP-funded health insurance; and 86 individuals were provided ADAP-funded Medicare Part D prescription insurance. In addition, the OHPC collaborates with 15 providers of HIV medical care and support services statewide. In 2019, the OHPC provided \$14 million in Ryan White Part B funding to these clinics and organizations.

The chart above represents 2018 reported cases and case rate per 100,000. A total of 612 HIV/AIDS cases were reported to the ADPH. The case count rate is 12.5 cases per 100,000 population.

The rate of HIV/AIDS cases was highest among blacks (33.4 cases per 100,000 population). The rate of HIV/AIDS cases was lower among Hispanics (3.3 cases per 100,000 population) and whites (4.1 cases per 100,000 population).

More than 48 percent of the HIV/AIDS cases reported in 2018 were residents of Jefferson (138 cases), Montgomery (82 cases), and Mobile (79 cases) counties.

Bureau of Home and Community Services

The Alabama Department of Public Health's Homecare Program began serving the citizens of Alabama in 1967. The Bureau of Home and Community Services (HCS) administers home care services statewide to homebound patients. The bureau's mission is to deliver high-quality services and compassionate care provided by competent and professional staff to patients in the home and community setting throughout Alabama.

Patients Served

HCS coordinates care between patients, caregivers, and their physicians. Nurses, aides, and therapists administered services to a total of 5,790 patients of all ages from pediatric to geriatric.

Home Health Services

Home health services are prescribed by a physician based on medical need. In addition, HCS is currently the only home health agency providing pediatric care. Services may include

skilled nursing, home health aide, medical social services, and physical therapy. Occupational therapy and speech language pathology may also be provided, as available.

HCS staff provided 181,511 home health visits statewide to patients covered by Medicare, Medicaid, and other insurance in FY2019. Alabama's Medicaid recipients received 214,847 total home health visits. HCS staff provided 71 percent of the state's total Medicaid home health visits in FY2019.

Remote Patient Monitoring (RPM) Service Hours

The RPM Program combines resources from ADPH Home Care, Alabama Medicaid Agency, and the University of South Alabama to provide an in-home monitoring service for specific chronic illnesses. Medicaid patients who have congestive heart failure, diabetes, and hypertension may qualify for the in-home monitoring program. The goal of RPM is to decrease exacerbation episodes, emergent care visits, hospital admissions, and costs. The RPM staff provided a total of 17,600 RPM service hours.

Figure 41. Patients Served by Program, FY2019

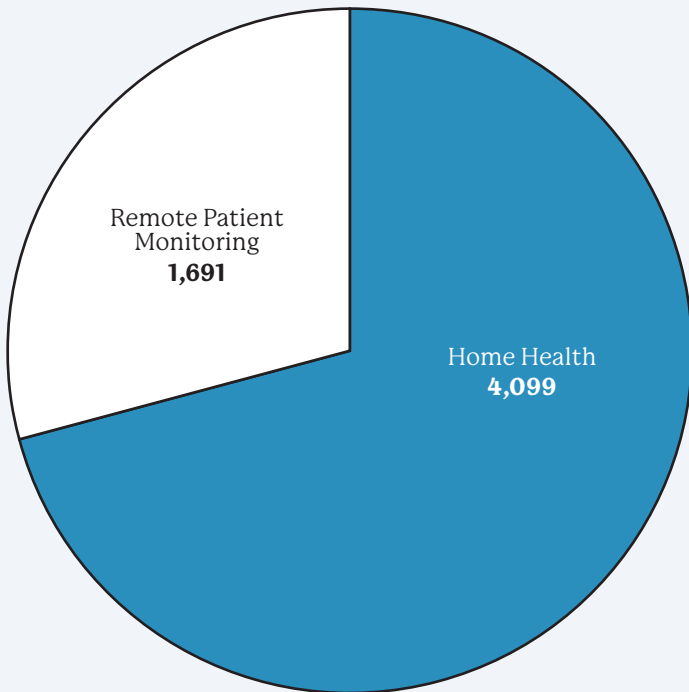


Figure 42. Alabama Medicaid Home Health Visits, FY2019

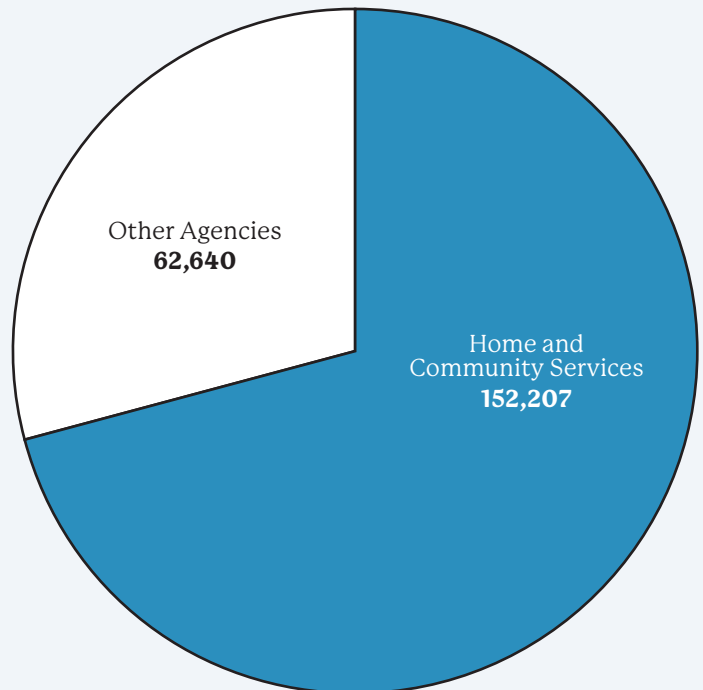
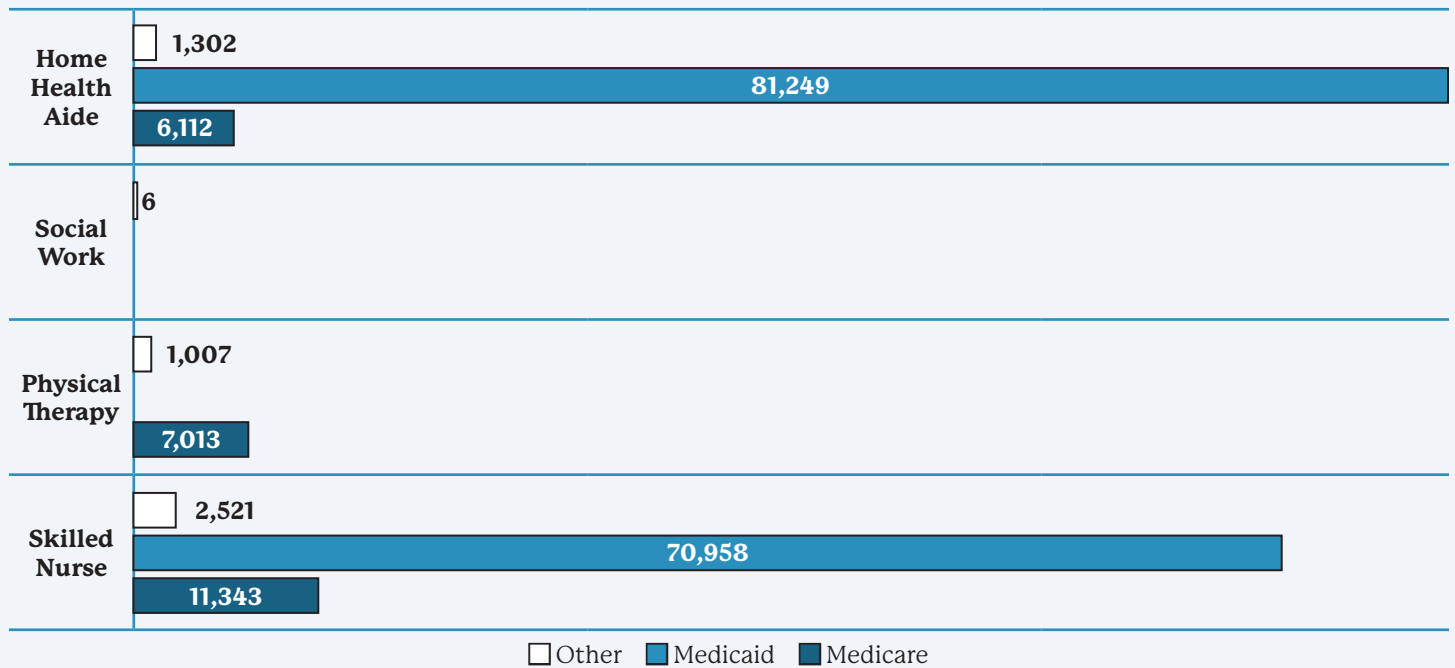


Figure 43. Home Health Visits by Discipline and Payor, FY2019



Office of Human Resources

The Office of Human Resources reviews and processes requests for personnel actions such as new hires, promotions, transfers, dismissals, leave reports, performance appraisals, and disciplinary actions, and coordinates the State Employee Injury Compensation Trust Fund Program.

The Employee Relations Section provides guidance, training, and/or reports regarding workplace conflicts, complaints, grievances, the Employee Assistance Program (through referrals), recruitment, Affirmative Action, Equal Employment Complaints/Charges, Americans With Disabilities Act (ADA) accommodations, and shuttle requests.

2019 Service Activities

- Revised the department's Policy for Compliance with Title VI of the Civil Rights Act of 1964; Interpreter Translator Policy; Policy for Collecting and Reporting Racial Health Data Policy; Title II ADA Effective Communication Policy; and the Civil Rights Plan.
- Attended 10 career fairs.
- Conducted "Interview and Selection" training for approximately 100 supervisors.
- Conducted "Performance Appraisal" training for approximately 125 supervisors.
- Established a new position, workforce development program coordinator.
- Implemented "Work Life Balance" training.

ADPH Minority Employment Comparison

The department is comprised of 2,674 merit system employees, 38 percent are minority employees. According to the EEO's 2018 *Job Patterns* statistics, the department has a higher percentage of minorities compared to the Alabama labor market. (Source: U.S. EEO)

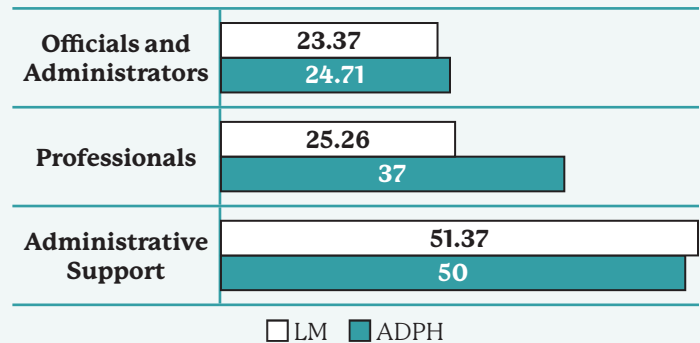
Figure 44. 2019 Personnel Actions Processed for Merit Employees

New Hires	207
Promotions	179
Dismissals	16
Retirements	76
Transfers Out	48
Other Separations	138
Employee Assistance Program Referrals (employees and dependents)	70
Hours of Leave Donations	2,333
Annual Appraisals	2,119
Probationary Appraisals	346

Figure 45. 2019 Turnover Rates in Districts and Central Office

	Total Employees	Turnover Rate (%)
Central Office	1,188	13.4
Districts	1,486	12.1
Statewide	2,674	12.7

Figure 46. Alabama Labor Market (LM) vs. ADPH, 2019



Bureau of Information Technology

The mission of the Bureau of Information Technology (IT) is to plan, provide, and support the information and logistics needs of the department. The bureau consists of five divisions: Project Management Support, Database Administration, Business and Information Architecture, Technical Support, and Logistics. IT procures, develops, and supports information technology systems to supply information to department and public users through an integrated information processing and telecommunication structure.

The Logistics Division manages the department's property assets, forms, emergency preparedness supplies, mailroom services, and vehicles. This division has the responsibility of auditing every property item assigned to the department statewide. In an effort to provide better accountability of the department's assets, the division began replacing many of the current property stickers with radio frequency ID stickers (RFID). This process will continue until all sensitive and high-value department items have been labeled with RFID stickers. This change will help make the auditing process easier and less time consuming.

Technical support requests continue to grow as IT continues to enhance its infrastructure. In addition to responding to daily support requests, Windows 7 desktop computers had to be replaced in all county health departments, the RSA Tower, and both laboratories. Also, more than 80 percent of the department's Windows 2008 servers were replaced or upgraded, core switches were replaced, and the bureau collaborated with the Office of Information Technology to upgrade firewall protection.

ADPH continued its partnership with the Alabama Medicaid Agency to provide resources and support for the Alabama Meaningful Use/Promoting Interoperability Program (MU/PI). Since its inception in 2014, this program continues to evolve and improve users' ability to monitor outbreaks, enter and evaluate data, access data for reporting, and send or receive data securely. From this partnership, the number of eligible hospitals and eligible professionals involved in the program have continued to grow. See MU/PI Support Data – figure 49.

Figure 47. Logistic Support Facts – 2019 and 2018 Comparison

Logistics Items Reported	2019 Quantities	2018 Quantities
Equipment Inventory Items	20,162	19,545
Equipment Inventory Value	\$42,967,007	\$41,851,700
Forms Managed	1,969	1,300
Form Packages Sent	4,756	6,563
Promotional Items Managed	600	400
Department Vehicles	57	55
Emergency Response Vehicles, Trailers, etc.	82	93

Noteworthy 2019 MU/PI Accomplishments

- PDMP was activated as an additional registry and is now available/open for registration (first year).
- Syndromic Surveillance HL7 Messages from eligible hospitals and urgent care locations are now being routed via ADPH Webservice, stored, then passed on to the CDC National Syndromic Surveillance Program.
- The Alabama Medicaid Agency verified 191 status letters (of which 139 were eligible professionals) for MU/PI participation.
- Interface engine (Rhapsody) processed:
 - o Immunization – 1,656,449 updates and 6,771,941 queries
 - o Electronic Lab Reporting – 8,427 messages
 - o Syndromic Surveillance – 1,588 messages
 - o ASCR – 204,150 messages

IT continues to look for ways to enhance and improve user experience, functionality, security, and responsiveness of the different systems supported. Noted below are a few examples of some of these enhancements during 2019:

- Upgraded the department's inventory management system, which is managed by the Logistics Division, to a cloud-based application. This new web-based application is very user friendly and takes the burden of server maintenance

Figure 48. IT Support Facts – 2019 and 2018 Comparison

IT Support Items Reported	2019 Quantities	2018 Quantities
Help Desk Calls	39,569	29,534
Personal Computers/Laptops Supported	5,799	5,422
Windows Servers Supported	412	419
Personal Computers/Laptops Installed	2,523	318
WAN Support Completed Work Orders	2,763	4,757
IP Phone Devices Supported	5,784	5,965
Windows 2016 Servers Deployed	282	49
Smart Phones Supported	766	655
Technical Support Projects Completed	13	17
Voice Mail Boxes Supported	2,660	2,635
Statewide Antivirus/Encryption Upgrades	1,475	4,089
IP Gateways Supported	78	78
WAN Support Miles Driven	169,747	193,944

Figure 49. Registration Breakdown by Program

Program	2019 Eligible Professionals Additions	Total Eligible Professional Count	2019 Eligible Hospital Additions	Total Eligible Hospital Count
Immunization	383	12,794	6	94
Electronic Lab Reporting	NA	NA	4	94
Syndromic Surveillance	529	4,385	6	93
Alabama Statewide Cancer Registry (ASCR)	155	3,975	2	35
Electronic Case Reporting	138	258	4	5
PDMP	110	110	10	10
Other Specialized Registries	38	502	0	8

and upgrades away from the department. Department personnel placing orders through the system have been very complimentary of the overall functionality, ease of use, and additional reporting available through this system.

- Completed the Wellness Web Application which allows screening and influenza vaccine data to be captured electronically, thus reducing the need for employees to key data from paper documents. From a review of 2019 PEEHIP and SEIB data, there were approximately 76,886 screenings and 20,225 flu vaccines for PEEHIP and approximately 13,538 screenings and 3,738 flu vaccines manually processed. This application should improve efficiency and cut down on possible keying errors while also reducing or eliminating the use of paper and the need for physical document storage. As a part of this enhancement, influenza vaccine data will also be imported into ImmPRINT via electronic file.
- Implemented a central SAS licensing server to replace individual licensing, reduce cost, and simplify management of the licenses. Previously the department managed approximately 50 individual licenses, but with this transition will now only have to manage one server license that will accommodate all assigned users. Users should see jobs run more efficiently and experience faster queries as a result of this transition.
- Implemented a Geospatial Information System (GIS), and assisted several bureaus within ADPH with their GIS requirements. The tools associated with this system will allow users to gain a visual perspective of possible areas of concern and target assistance and education to those areas. This system can be used to assist decision makers

on how to allocate resources to those areas and improve communication with the public on where the resources (treatment or support facilities) are located.

- Implemented a multiple match response for ImmPRINT to aid in identifying the correct patient in order to reduce patient duplication. Previously existing programming looked for an exact patient match, but multiple match response looks for similarities and checks several patient identifiers for possible patient duplication prior to allowing the creation of a new patient record.
- Integrated/interfaced the new Health Alert Network (HAN) system (ReadyOPS) with ALNBS to enable alert routing to targeted staff, or to prevent alerts from being sent for some laboratory results. This integration allows for specifically identified lab results to be automatically directed to disease control field investigators or select staff members via their mobile devices without human intervention. Previously, field investigators or select staff members had to manually log into the system to check for notifiable disease alerts.
- Implemented an onsite Enterprise Content Management System (ECM). This system allows users to electronically store, access, view, and print their cataloged documents. The Office of Radiation Control has already transitioned many of its documents to this system. Two hundred three filing drawers, or 1,115,000 pages, have been moved to this system for this office, and other offices have expressed an interest in transitioning some of their documents to this system. Use of this system will save time, money, and space since the physical storage requirements are minimized or eliminated.

Bureau of Prevention, Promotion, and Support

Behavioral Health

Injury Prevention and Fatality Review

The goals of the Alabama Child Passenger Safety Program are to educate Alabamians on the safe use of child passenger restraints, provide training for individuals to become certified child passenger safety technicians, and establish car seat fitting stations at specific locations around the state through a grant from the Alabama Department of Economic and Community Affairs. With the grant, ADPH established 18 new car seat fitting stations that are managed by 6 local public health district coordinators.

The Rape Prevention and Education Program, a program funded by the Centers for Disease Control and Prevention (CDC), provides prevention of sexual violence perpetration and victimization by decreasing sexual violence risk factors and increasing protective factors for the general population in 40 Alabama counties through grants to the Alabama Coalition Against Rape (ACAR) and 9 rape crisis centers. The Public Health and Human Services Block Grant provides prevention education and awareness to the public and support through the promotion of public awareness and general assistance to victims of sex offenses within the state in 29 counties through grants to ACAR and 6 rape crisis centers. Through this work, more than 20,000 youth and young adults have been reached.

Suicide is the eleventh leading cause of death in the state, with 836 citizens lost to suicide in 2017, compared to 602 deaths due to homicide. The Alabama Youth Suicide Prevention Program began its third year working to reduce the rate of suicides and suicide attempts for youth ages 10 to 24. The program provides grants to crisis centers, the state suicide prevention coalition, and colleges and universities to provide education, outreach, screenings, and referrals to promote suicide prevention, awareness, and services in communities throughout the state. In 2019, suicide prevention program partners conducted 426 trainings, resulting in 13,008 individuals trained as gatekeepers to identify and refer individuals at risk for suicide.

Surveillance

The Surveillance Branch is comprised of three programs. Two of the programs review various types of deaths that occur in Alabama and have a primary focus on prevention. Prevention strategies are developed, and programs are implemented based upon the findings of reviews, trends, and characteristic analyses, and identification of risk factors. The newest program to the branch is the Food and Drug Administration (FDA) Tobacco Inspection Program.

The Alabama Child Death Review System (ACDRS) mission is to understand how and why children die in Alabama to prevent future child deaths. Through local child death review teams throughout the state, child death cases are reviewed. In 2016, 181 cases were reviewed, which was an increase from 2015 in which 168 cases were reviewed. In FY2019,

ACDRS produced the program's 2014-15 annual report. The report highlighted the state's three leading causes of death in Alabama for children, which included sleep-related; motor vehicle-related; and firearm, weapon, and assault-related deaths. In August, local team coordinators convened in Montgomery for two 1-day training sessions. Part of the training was facilitated by staff from the National Center for Fatality Review and Prevention. Thirty coordinators attended the training. In FY2019, the ACDRS State Team had four new members appointed through the Governor's Office. The program continues to partner with the University of Alabama at Birmingham and the University of South Alabama on prevention efforts in the state. ACDRS continues to work to make strides that reduce child deaths in Alabama through awareness, education, and prevention efforts.

The Alabama Violent Death Reporting System (AVDRS) was established under a CDC grant in 2016. AVDRS participates in CDC's National Violent Death Reporting System and utilizes vital statistics, law enforcement, and coroner/medical examiner reports to record, analyze, and link homicides, suicides, and certain types of undetermined deaths in Alabama across all age groups. The primary goal of AVDRS is to assist with developing and improving violence prevention programs in the state by providing data on trends and characteristics of violent deaths. The program completed a 10-county pilot surveillance of violent deaths in April and started statewide surveillance of violent deaths in all 67 counties in May for the 2018 data year. AVDRS will be working in collaboration with a new grant, Overdose Data to Action, to conduct surveillance of drug overdose deaths in the state. Through this collaborative effort, more timely and comprehensive data on fatal opioid overdoses and risk factors associated with fatal overdoses can be identified.

The FDA Tobacco Inspection Program is in its ninth year of a contract with the FDA's Center for Tobacco Products to conduct inspections to ensure tobacco permit holders comply with the requirements of the Tobacco Control Act. In FY2019, staff conducted 471 advertising and labeling inspections of all tobacco retailers in the state to ensure they are following federal law when advertising, displaying, and selling regulated tobacco products. The department's sub-grantee, the Alabama Law Enforcement Agency, conducted 3,034 undercover buys by accompanying a minor who attempts to make a tobacco purchase. Every tobacco retailer in the state is inspected with the assistance of a trained, age-appropriate, undercover minor to determine if the teenager is able to purchase tobacco products in violation of the Tobacco Control Act of 2009. The program conducted 3,505 inspections in 2019, which revealed a combined violation rate of 9.9 percent.

Youth Tobacco

The 2019 National Youth Tobacco Survey showed that more than 5 million youth used e-cigarettes, an increase from 3.6 million in 2018. The Youth Tobacco Prevention Program was awarded \$1 million to implement a grant program to effect social norm change around tobacco use, address the

marketing of emerging products to youth, promote policies that protect youth from nicotine initiation and exposure to secondhand smoke, and promote tobacco cessation.

Youth Tobacco Prevention Program grantees delivered 353 presentations based on the Stanford Medicine Tobacco Education Curriculum. In conjunction with the presentations, 12,159 pre/post tests were completed by youth in grades 6-12. Prior to the training, about 20 percent of students indicated that they had no knowledge of how e-cigarettes, vape, and JUUL manufactures targeted young people. In the post survey, 80 percent indicated a lot of knowledge was gained regarding the contents of a JUUL pod and the understanding that hookah is as harmful as cigarettes.

Youth Tobacco Prevention Program grantees organized or participated in 52 community awareness activities such as local coalition meetings, health fairs, and National Kick Butts Day. In partnership with a media company, the youth program mass media campaign launched in May 2019. The 2019 message was aimed at addressing the youth vaping epidemic. Using various television, live-streaming services, and social media platforms (Facebook, Instagram, and Twitter) an estimated 926,320 youth under age 18 were reached with anti-vaping messages and approximately 2,235,596 adults were reached. In addition, the Youth Tobacco Prevention Program grantees were successful in completing assessments of 10 current tobacco school policies in their respective school districts: Florence, Huntsville, Irondale, Madison, Prichard, Red Bay, Semmes, Sheffield, Tuscaloosa, and Tuscumbia.

Center for Emergency Preparedness

The Center for Emergency Preparedness (CEP) is responsible for coordinating disaster preparedness and response for the department and serves as the coordinating entity for Emergency Support Function 8, Health and Medical, for the state during emergency responses. CEP is funded solely by federal grants.

- The CDC provided \$9,834,331 during FY2019-2020, in a cooperative agreement to provide overall direction to and management of the department's assessment and planning for the department's response to acts of terrorism, outbreaks of disease, and other public health threats and emergencies such as meteorological, geological, chemical, and radiological disasters.
- The Assistant Secretary for Preparedness and Response Hospital Preparedness Program provided \$3,411,603 in a cooperative agreement with the department for the same period. These funds were designated to enhance healthcare system capability and capacity and preparedness for naturally occurring disasters or acts of terrorism resulting in mass casualties.

Planning, partnership building, and exercise continue to be a focus of CEP. The Homeland Security Exercise and Evaluation Program (HSEEP) provides a set of guiding principles for exercise programs, as well as a common approach to exercise program management, design and development, conduct, evaluation, and improvement planning. CEP has a master exercise practitioner certified by the Federal Emergency Management Agency's Emergency Management Institute and conducts exercises in accordance with program guidelines.

In 2019, CEP participated in multiple district/local exercises, one major statewide exercise, and one large regional exercise. The exercises included testing the capability and capacity to communicate between various facilities and agencies, operationalize various response plans, and meet the health and medical needs of the jurisdiction based upon a defined scenario.

CEP's statewide exercise tested the capabilities of the medical countermeasure distribution plan. The 2019 plan focused on the receipt and distribution of antiviral medications in response to a pandemic influenza outbreak. The capabilities tested included the ability to set up and operate the public health emergency operations center; receive large quantities of medications, equipment, and supplies from the Strategic National Stockpile; and store and ship these to local medical facilities and providers.

Nutrition and Physical Activity (NPA)

The NPA Division provided state leadership and represents the department on issues related to nutrition, physical activity, obesity, chronic disease, and wellness. The vision for the division is for Alabamians of all ages to embrace a culture of healthy choices as their normal way of life.

Adults and youth in Alabama continue to have high rates of obesity and chronic disease. The following NPA initiatives address obesity and chronic disease in adults and youth:

- Entering its fourteenth year, Scale Back Alabama is an inclusive statewide weight-loss campaign that encourages Alabama to get healthy and have fun while doing it. The 2019 program drew in over 17,500 people from around the state and the total weight loss was over 51,000 pounds. The Scale Back Alabama school program continues to engage participants working in schools with nearly 120 schools enrolled in 2019.
- The State Obesity Task Force is a network of organizations and individuals which work to reduce and prevent obesity in Alabama. In collaboration with the task force, representatives from the division led efforts to develop a State Physical Activity and Nutrition Plan. The plan will serve as guidance on initiatives and policies that are being implemented statewide to prevent and reduce the prevalence of obesity in Alabama. It will contain strategies to encourage and support healthy nutrition choices and regular physical activity.
- The Alabama Disability and Health Program was established in 2012, with funding from the CDC, to address growing disparities in health between people with and without disabilities. In Alabama, 33.2 percent of adults have some type of disability compared to 25.6 percent of adults in the United States. People with disabilities continue to experience significant health disparities and are more likely to be inactive and have obesity, among other health inequities.

Activities:

- Partnered with the State Department of Education in the development of embedded adapted physical education accommodation suggestions within every physical education standard for Grades K-12. This will impact 84,280 students with disabilities enrolled in 1,521 public schools.

- Established a Disability and Health Advisory Committee.
- Partnered with Huntingdon College, Ability Sports Network, to provide regional adapted physical education workshops in Jacksonville, Mobile, and Montgomery for 122 school personnel working in 9 city and 15 county school systems.
- Continued partnership to implement the 100 Alabama Miles Challenge, a statewide program designed to encourage Alabamians to live a more active lifestyle.
- Partnered with the National Center on Health, Physical Activity, and Disability/Lakeshore Foundation, to develop and disseminate inclusive health promotion resources, guidebooks, and online trainings for worksites, schools, and after-school programs.
- Continued adaptation of Scale Back Alabama program accessibility to increase participation for people with mobility limitations and other types of functional disabilities.
- The Healthy Wellness Initiative is a collaboration between NPA and the Alabama Department of Education to provide wellness, nutrition, and physical activity training, technical assistance, and information to the 21st Century Community Center Learning Program and Dependent Care grantees. In 2019, the initiative sponsored four regional trainings for after-school programs by Dr. Gale Goerke, a nationally recognized expert in physical education. She conducted specialized trainings for Alabama after-school teachers on kinesthetic learning and inclusive, developmentally appropriate physical activity.
- The Alabama State Office of Minority Healthy (SOMH) works to expand the knowledge and awareness of existing health disparities among minority populations to lead to the expansion and creation of health policies and strategies to eliminate such disparities. In 2019, SOMH worked with multicultural partners in Hale, Marengo, Sumter, and Tuscaloosa counties to increase awareness and use of positive health behaviors and practice through improving the availability of healthy food and beverage options and health-related programs such as Scale Back Alabama and Cooking Matters. The office also worked within the same communities to increase access to physical activity opportunities/programs and healthcare services. Additionally, SOMH staff organized, sponsored, presented in, and/or hosted multiple events to educate and inform the public about minority health, health disparities, and the social determinants of health specific to Alabama.
- As an implementing agency for the Supplemental Nutrition Assistance Program (SNAP) Education Program, the division provides nutrition education to individuals who are eligible for SNAP benefits. Educational activities took place in schools, local health departments, and senior nutrition centers where nearly 1,165 individuals received direct education. An additional 55,595 individuals were reached indirectly with nutrition messages, resources, and materials. Trainings that promote and support school wellness policies were completed, reaching 69,300 students and school faculty statewide.

Cardiovascular Health (CVH)

In 2017, the prevalence rate of high blood pressure (BP) rose to 41.2 percent of the population, according to the newest

data from the CDC. Approximately 60 percent of those with high BP do not have their BP under control. The CVH Program works to promote community and health system activities to increase self-monitoring of BP and the awareness/management of hypertension and high blood cholesterol.

Program accomplishments:

- Established and monitored 53 public BP self-monitoring sites in 30 counties around the state. These sites include senior centers, public libraries, barber shops, recreation centers, independent pharmacies, and other public locations. During 2019, almost 2,000 individuals took their BP more than 6,000 times at one of the monitoring sites, and participants' systolic and diastolic levels dropped when BP was taken at least four times over at least one month.
- Implemented an outreach program by funding six social workers to serve as district outreach coordinators (DOCs) in each of the ADPH public health districts. The efforts of the DOCs increased the monthly BP readings to 900-1,000 compared to the average 200-300 BP readings per month. CVH plans to continue promoting the use of the BP sites through the division's new online resource directory, a map-based directory of health programs related to the prevention and management of chronic disease.
- Collaborated with the Mobile County Health Department on an Association of State and Territorial Health Officials-sponsored hypertension project within Mobile's federally qualified health center. The project's objective is to promote the enrollment of African American males with hypertension in lifestyle modification programs.

Diabetes

The Alabama Diabetes Control Program focused on clinical and community linkages to better support chronic disease management and prevention, through supporting programs such as Diabetes Self-Management Education and Support (DSMES) and the CDC Diabetes Prevention Program (DPP). DSMES is the ongoing process of facilitating knowledge, skill, and ability necessary for diabetes self-care. Programs must meet 10 national standards and apply for accreditation/recognition from the American Diabetes Association or the American Association of Diabetes Educators. Once the programs are accredited/recognized, they can be reimbursed from various insurance plans for the classes. Approximately 50 accredited/recognized DSME main sites and 21 DPP sites are in Alabama.

Program accomplishments:

- Awarded \$159,904 in mini-grants to organizations to implement DPP and DSMES programs and help programs to become accredited/recognized.
- Offered three DPP facilitator trainings that allowed for 59 new trainers in the state.
- Offered a marketing workshop for DPP program partners.
- Implemented an outreach program by funding six social workers to serve as DOCs. The DOCs began developing community health teams to support diabetes initiatives, collected resources in their communities for those with diabetes or at risk for diabetes, visited providers to promote referrals and implementation of DSMES and DPP

programs, and provided technical assistance to programs in their communities.

- Renewed support for the Samford McWhorter School of Pharmacy DSMES toolkit training which educated 22 pharmacists with the intent of increasing DSMES-accredited/recognized programs across the state.

Health Media and Communications

The Communications and Health Marketing Division merged with the Video Communications and Distance Learning Division in 2019 to form the Health Media and Communications Division. The offices were combined to streamline the communications, marketing, and distance learning initiatives within the department, allowing division staff to collaborate to promote the overall message of ADPH. One of the first initiatives of the newly formed division was unveiling the new official seal of the department. The colorful and meaningful new design was created to recognize the department's mission of promoting, protecting, and improving Alabama's health. People and communities are central to the department's mission, and the design of the seal depicts that message.

Elements within the updated seal symbolize the following:

- The department's strong focus on the health and well-being of every Alabamian.
- Reinforcing the effort to work together and network to improve the health-diverse communities and systems that support the department's efforts.
- Serving as a reminder of the role that science, technology, and data play in ensuring the public is accurately informed.
- Forming a base of support and symbolizing a positive path for the people of Alabama to be informed and to choose wisely.

The official seal replaces the previous version as the sign of authenticity and authority on documents such as letterhead, forms, legal notices and certificates, and licenses. In addition to the official seal, the circular blue Alabama Public Health logo continues to be used on all promotional and educational documents prepared by the department.

The Alabama Public Health Training Network provides departmental training, educational resources, public information, and emergency response through live broadcasts and production services. In July 2019, the division began its second year of a 4-year agreement serving as a community-based training partner with the Region IV Public Health Training Center located at the Rollins School of Public Health at Emory University in Atlanta, Georgia. The division works collectively as a network with Emory, along with other partners and technical assistance providers to improve the ability of the public health workforce to meet national, state, and local needs. Division staff utilized satellite and web technologies in 2019 to offer five distance learning training programs on topics that included motivational interviewing, chemical warfare, children's environmental health, elevated lead in children, and adolescent addictions.

Marketing worked with more than 35 ADPH programs to create health messages and distribute them to Alabama citizens. One of the goals of the division's Digital Media

Branch is to ensure departmental promotion, education, and dissemination efforts are reaching the broadest possible audience in the quickest, most efficient manner. Specific departmental programs, marketing/promotional campaigns, and events are promoted on the department's website (alabamapublichealth.gov); social media networks (Instagram, Facebook, Pinterest, Twitter, and YouTube); and mobile apps. The branch assisted departmental programs in promoting an unprecedented amount of marketing campaigns and events in 2019.

Public Information works to improve public health by disseminating information through the mass media and departmental publications and provide awareness of departmental objectives, activities, and services throughout the state. Activities included preparing and distributing 100 news releases and editing a variety of documents in 2019.

Management Support

The Office of Management Support (OMS) provides leadership and coordination for critical departmental programs such as the following: Records Disposition Authority, Grant Management, Policy Clearinghouse, and Competitive Selection Process. Major programs in OMS also include Public Health Accreditation, Performance Management and Quality Improvement (QI), and Workforce Development.

Public Health Accreditation

In 2017, the Public Health Accreditation Board (PHAB) finalized a rigorous review of the documentation submitted by the department and conducted a site visit over the course of 5 months ending with an on-site visit by the review team assigned to the department. On June 6, 2017, the department received PHAB accreditation through the next 5 years.

In 2018 through 2022, the accreditation teams are working on reaccreditation efforts focused on identification and preparation of documentation on behalf of the department. Accreditation leadership team meetings with the domain leads continued throughout the year and focused on the reaccreditation planning process and how to meet the expectations of PHAB. Two reaccreditation training opportunities were provided. One utilized a retired ADPH employee who works closely with PHAB. The other brought PHAB staff to ADPH to train the accreditation teams and representatives from health departments in Arkansas, Georgia, and Mississippi.

Performance Management and QI

In 2018, department leadership and staff worked together to develop a 5-year strategic plan and a 2019 annual plan. The strategic and annual planning processes drive the implementation of a newly acquired performance dashboard that allows the department to track performance toward stated goals. The 2019 annual planning teams worked to establish goals and objectives. Throughout the year, the teams met monthly to work toward achieving the goals, while incorporating a sense of continuous quality improvement and performance management.

QI training continues to be provided to departmental staff, utilizing new training methods taken from other health departments and modified to meet ADPH's needs. A total

of 19 training sessions and workshops were held in 2019, with 89 participants. In addition, one QI team and one performance management team received coaching from the QI Training Team/QI Council.

Workforce Development

The ADPH Workforce Development (WFD) Program offers training programs and initiatives designed to help departmental employees deliver high quality public health services. The program's goal is to assure a competent public health workforce through strategic planning to anticipate and prepare the workforce for changes in public health practice through development of appropriate training programs and opportunities, both state-based and through regional and national initiatives.

Through the WFD Program, staff training is offered on a continuous basis through partners such as the State Personnel Department and the South Central Public Health Partnership. In addition to training offered through partners, the WFD Program supported an epidemiology track at the Alabama Public Health Association Education Conference and the development of a soft skills training team. The team will be utilized to provide soft skills training across the state based on the workforce training needs identified through an annual needs assessment. This team was established as a result of the 2018 training needs assessment.

Departmental employees participated in Toastmasters International, a world leader in communication and leadership development, in order to hone their skills. During 2019, 30 employees participated in training sessions through the Tower Toastmasters. Tower Toastmasters' participants were provided a mutually supportive and positive learning environment in which each individual member had the opportunity to develop oral communication and leadership skills which in turn fostered self-confidence and personal growth. Fifty-one training sessions were held, in which employees had an opportunity to communicate effectively by delivering speeches, providing and receiving performance evaluation feedback, and completing leadership projects. Participants attained a list of accomplishments, and Tower Toastmasters was represented in leadership roles at the local, area, and division levels. Demonstrating continued success, Tower Toastmasters earned the highest level of achievement from Toastmasters International in 2019 as a President's Distinguished Training Program for the sixth consecutive year.

To recruit and retain a highly skilled workforce, the department supports hosting students enrolled in educational institutions as interns. Through the internship program, individuals are offered an opportunity to make a positive contribution and to develop professional skills and experience. The internship experience offers an opportunity for students to learn about the role and responsibility of public health, earn educational credits, gain valuable work experience, and explore new careers in public health. The department works with various educational institutions to provide nonclinical internship placements throughout the state public health system. Through a partnership agreement with the UAB School of Public Health, the department hosts several graduate student interns each year.

Pharmacy

The Pharmacy Division continues its involvement in activities aimed at fighting the opioid crisis. In 2019, four conferences were held throughout the state that provided education and updates to healthcare professionals, state agencies, community groups, and other stakeholders. The division partnered with the Alabama Department of Mental Health to distribute resource information to targeted areas of the state. Information distributed included a 24/7 help-line number that people seeking treatment or information about substance use disorder can call to receive immediate help, including a peer counselor to help navigate treatment options. Pharmacy Division staff members have active roles in the Rescue, Data, and Prescriber/Dispenser subcommittees of the Opioid Overdose and Addiction Council. The division also provided distribution services for several naloxone grants, helping equip law enforcement, first responders, and high schools with this opioid overdose reversal medication.

Several features were added to the PDMP, a database of all controlled substances dispensed in Alabama. These include:

- Prescriber score cards.
- New format that displays a dashboard and patient overdose risk scores.
- Advanced analytics.
- PDMP integration into the electronic medical records and pharmacy management software.

Other activities in 2019 included:

- Established and oversaw implementation of medication dispensing and inventory policies for all county health departments.
- Provided medication consultation to all public health programs including specific programs within the various bureaus, county health departments, emergency preparedness, and other state agencies on medication-related and pharmacy-related activities. Information requested included medication storage, medication purchasing and dispensing, clinical information, scheduling of medications, health professional continuing education programs, and statutory regulations.
- Participated in emergency preparedness exercises.

Primary Care and Rural Health

The Office of Primary Care and Rural Health (OPCRH) administers programs to improve healthcare access and quality in rural and medically underserved communities. Currently, 63 of Alabama's 67 counties have areas designated as being medically underserved. These underserved areas have a high prevalence of health care issues, including chronic diseases such as diabetes, hypertension, and heart disease, and other challenges such as a high rate of substance abuse. The office employs a number of programs and works very closely with partners such as the Alabama Rural Health Association, the Alabama Hospital Association, the Alabama Primary Health Care Association, and departmental bureaus to address these health issues. Some of the major programs used by the OPCRH are the recruitment and retention of healthcare professionals, and technical assistance to assist

small rural hospitals and health providers in transitioning to a new value-based healthcare system.

OPCRH utilizes a national, web-based recruitment system called 3RNet to recruit into medically underserved areas. During FY2019, approximately 792 primary care practitioners were referred to rural hospitals and clinics in Alabama. Another recruitment program is the National Health Service Corps (NHSC), which has both scholarship and loan repayment components.

The NHSC covers a wide array of health professionals, from physicians, dentists, and nurses to behavioral health professionals. These programs are supplemented by a J-1 visa waiver program, which enables placement of foreign-trained physicians in return for 3 years of service in medically underserved areas. Currently, there are over 150 healthcare providers delivering medical care to rural and medically underserved Alabamians under these programs. The OPCRH also assists communities in establishing Centers for Medicare and Medicaid Services-certified rural health clinics. During the past year, 9 new rural health clinics were established, for a current total of 113. The OPCRH collaborates with various entities to address workforce issues essential to improving the health of Alabama residents. One such initiative is the partnership with the University of Alabama at Birmingham Huntsville Medical Campus to develop a rational service area plan designed to more accurately identify workforce shortage areas for federal designation. These areas determine eligibility for certain federal grants as well as eligibility for the NHSC and J-1 visa waiver program. Alabama's 35 small, rural hospitals are also assisted under federal grants administered by the OPCRH which target improvement of operational efficiency, quality, and hospital sustainability.

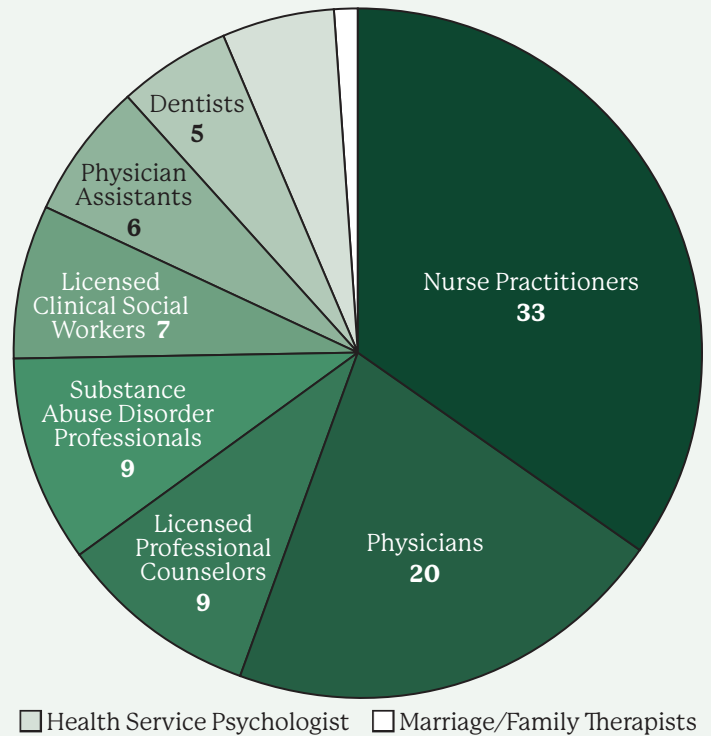
Figure 50 shows the distribution of NHSC-obligated providers who were working in medically underserved areas in Alabama in 2019.

Wellness

Public Education Employees' Health Insurance Plan Wellness (PEEHIP)

PEEHIP Wellness is a joint project of the department and PEEHIP. In FY2015, PEEHIP mandated that members be

Figure 50. FY 2019 NHSC Clinicians



screened or pay more for their medical insurance. Members had the opportunity to get a screening without being penalized. During FY2019, department nurses performed 79,241 screenings at the worksite and healthcare providers conducted an additional 44,250 screenings. During this same time frame, 24,681 received an influenza vaccine.

State Employees Insurance Board (SEIB) Wellness Program

During FY2019, 13,538 state employees were screened by Wellness Program staff for the SEIB. A total of 3,738 SEIB employees received an influenza vaccine.

Local Government Health Insurance Board (LGHIB)

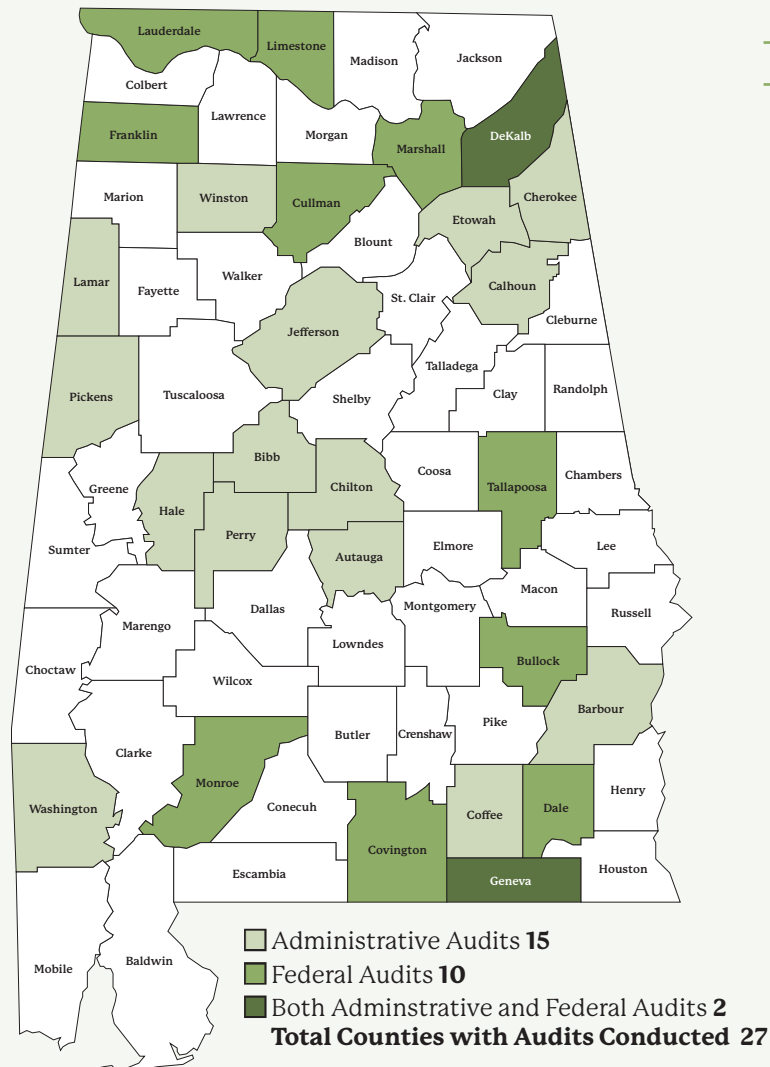
During FY2019, 111 local employees were screened by Wellness Program staff for the LGHIB. A total of 1,905 LGHIB employees received an influenza vaccine. The Wellness Program has had a contractual agreement with LGHIB since 2017.

Office of Program Integrity

The Office of Program Integrity is an independent appraisal arm of the department. The office serves the State Health Officer to provide assurances regarding the integrity of the department's financial systems, compliance with federal requirements, and compliance with applicable state laws and regulations. The office also serves as consultant for the programs, services, and functions of the department.

The primary mission of the office is to assist directors, managers, and administrators in effectively discharging their duties by reviewing various activities and functions within the department, presenting reports on deficiencies, and providing recommendations for corrective actions concerning those activities.

Figure 51. Accomplishments by Audit Category, FY2019



During 2019, the office continued its mission of objectively evaluating county health departments and central office units in the areas of financial and administrative activities and federal compliance.

Figure 52. Accomplishments by Audit Category, FY2019

Financial/Administrative Audits	
County Health Departments	17
Property Audits	17
Federal Program Audits	
County Health Departments	12
Special Reviews and Consulting	
SAFE (Security for Alabama Funds Enhancement) Program Compliance Monitoring	
Subrecipient Compliance and Monitoring	

Office of Radiation Control

The mission of the Office of Radiation Control is to protect the public and occupationally exposed workers from unnecessary exposure to ionizing radiation. This is accomplished by registering, licensing, and inspecting the day-to-day use of ionizing radiation in the state of Alabama; working with registrants and licensees to assist them in developing and implementing programs to maintain radiation doses as low as reasonably achievable; performing routine monitoring of radioactivity in the environment; responding to incidents involving radioactive material; and conducting formal public and professional educational programs.

Notable Achievements for FY2019

Radioactive Materials Program: The radioactive materials program operates under an agreement with the U.S. Nuclear Regulatory Commission (NRC) and Alabama is one of 39 Agreement States. Radiation Control regulations provide a general license for the use of radioactive material contained in certain products, allowing certain persons to receive and use a device containing radioactive material if the device has been manufactured and distributed in accordance with a specific license issued by the NRC or by an Agreement State. A specific license is issued to a named person or company who has filed an application for a license under the provisions of the Radiation Control regulations and is subject to specific conditions of use under that license. There are 192 general licensees and 439 specific licensees using radioactive material in Alabama. During this period,

the Office of Radiation Control conducted a total of 211 inspections of radioactive material licensees. As an Agreement State, the program is subject to periodic reviews under NRC's Integrated Materials Performance Evaluation Program (IMPEP). In May 2019, an IMPEP team reviewed the Radioactive Materials Licensing and Inspection Program and found the program to be adequate to protect public health and safety and compatible with NRC. The next scheduled IMPEP review will be in 2023.

Medical X-Ray: The Office of Radiation Control conducted 1,030 routine inspections of X-ray and particle accelerator facilities during the period. This included 132 inspections of mammography facilities under the Mammography Quality Standards Act (MQSA), 13 inspections of particle accelerator facilities, and 55 inspections of non-medical X-ray facilities. The X-Ray Compliance Branch continues to review new uses of X-rays in medicine to help assure the health and safety of patients and the operators of the X-ray equipment.

Emergency Planning: During this period, the Office of Radiation Control successfully completed an Ingestion Emergency Pathway Zone (IPZ) exercise for the Farley Nuclear Plant that was evaluated by the Federal Emergency Management Agency (FEMA) and performed in coordination with the Alabama Department of Agriculture and Industries, Alabama Department of Environmental Management, Alabama Emergency Management Agency, and Alabama Department of Public Health (ADPH) Division of Food,

Figure 53. Radioactive Material Licensees

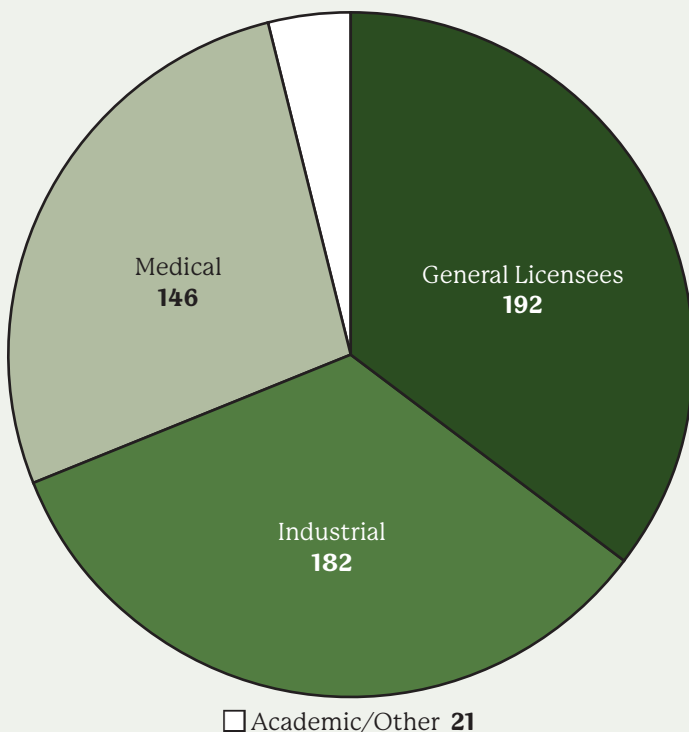
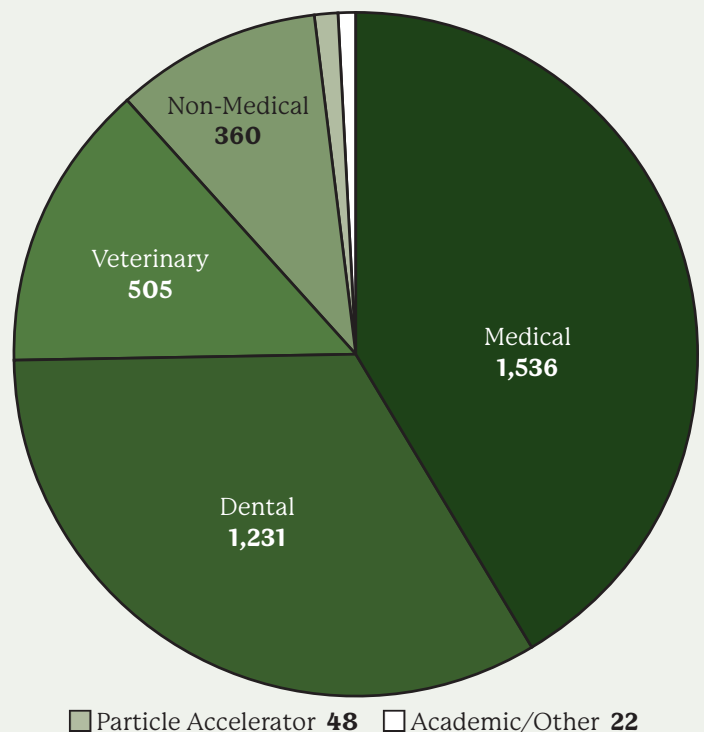


Figure 54. X-Ray and Particle Accelerator Registrants



Milk, and Lodging. The IPZ exercise is conducted every 8 years to assess the level of preparedness and demonstrate radiological sampling, analysis, and decision-making capabilities to protect the health and safety of the public and environment in the unlikely event of a radiological release from a nuclear power plant. The Office of Radiation Control provided radiation safety and emergency response training to 1,140 individuals during this period. Those receiving training included individuals from ADPH, Alabama Emergency Management Agency, county emergency management agencies, hospitals, emergency medical services, police, fire, and sheriff's departments, as well as volunteer members of the public around Alabama's two nuclear power plants.

Environmental: The Office of Radiation Control continues to collect ambient, air, water, soil, and vegetation samples from areas surrounding certain radioactive material licensees and the two nuclear power plants located in Alabama to confirm that any releases of radioactive material are within regulatory limits.

Radon: Through continued outreach opportunities and through the radon website, the Office of Radiation Control encourages citizens in Alabama to test their homes for radon. During this period, approximately 2,000 radon test kits were given away by the office, while 579 homes were tested for radon. For new home constructions, 144 new homes were built using radon resistant new home construction techniques.

County Health Department Services

Public Health services in Alabama are primarily delivered through county health departments. Larger counties and counties with specific needs have more than one county health department location. A wide variety of services is provided at county health departments, as well as valuable information.

Typical services and information include the following:

- Alabama Breast and Cervical Cancer Early Detection Program
- Bio Monitoring Services
- Birth, Death, Marriage, and Divorce Certificates
- Cancer Detection
- Child Health
- Children's Health Insurance Program (CHIP)
- Dental Services/Health Education and Community Fluoridation Programs
- Diabetes
- Disease Surveillance and Outbreak Investigations
- Family Planning
- Food and Lodging Protection
- HIV/AIDS
- Home Care Services
- Immunization
- Insect and Animal Nuisances That Can Transmit Disease to Humans
- Laboratory
- Maternity
- Nursing Services
- Nutrition Services
- Onsite Sewage Disposal Systems
- Sexually Transmitted Diseases (STDs)
- Solid Waste
- Telehealth
- Tuberculosis
- Water Supply in Individual Residential Wells
- Women, Infants, and Children (WIC)

Public Health Districts

East Central District

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Southeastern District

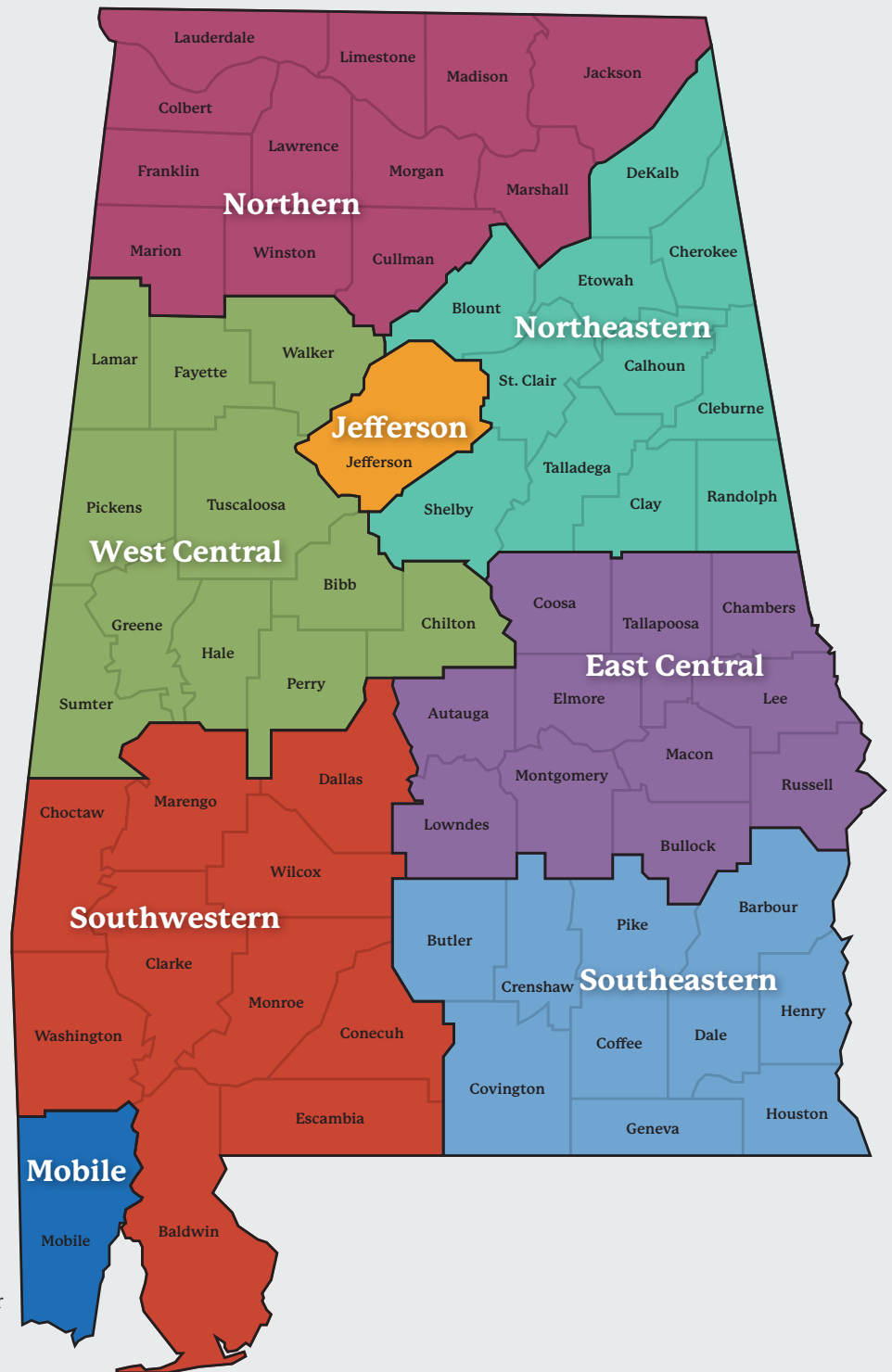
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Southwestern District

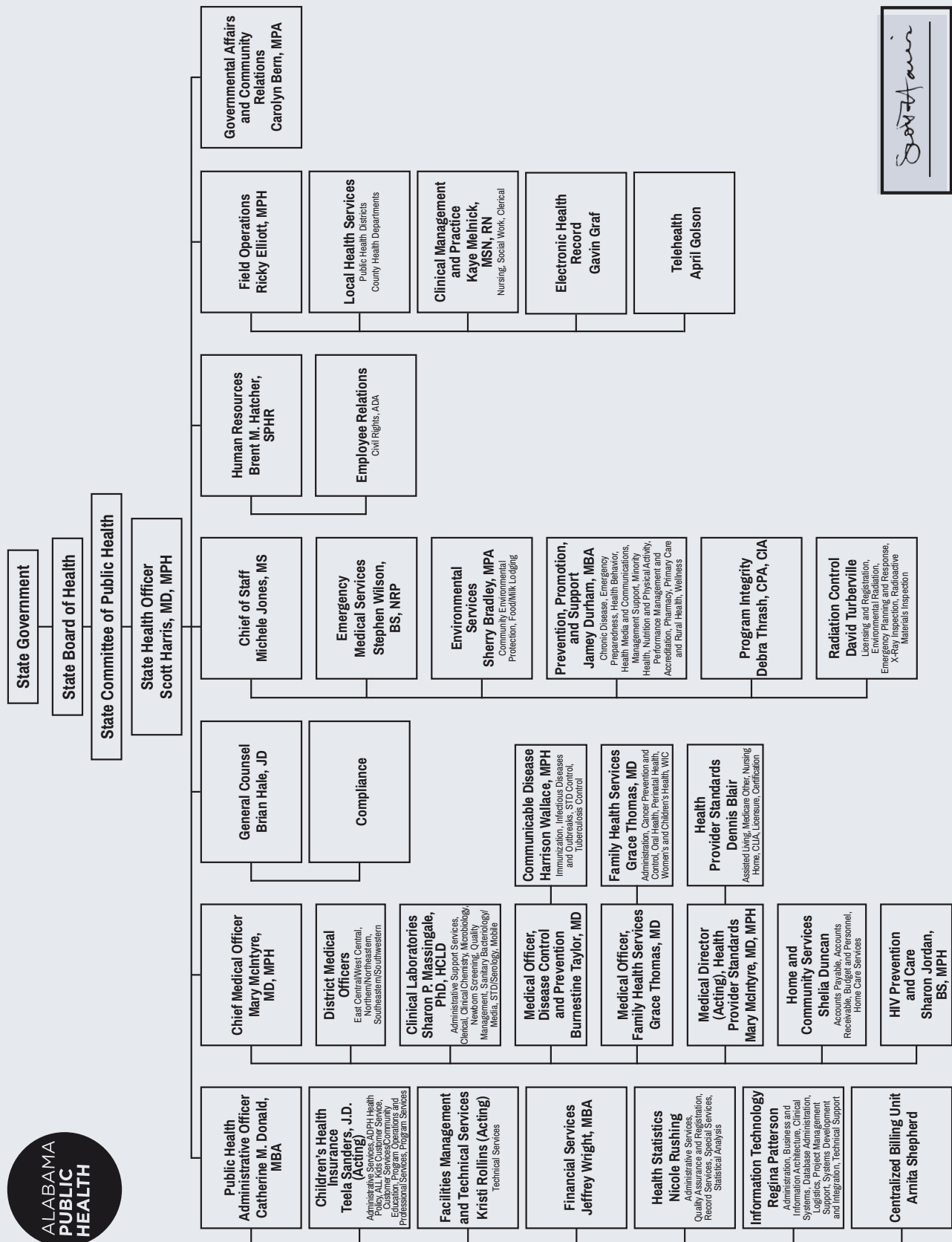
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ADPH Organizational Chart



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will be made available upon request.

This document may also be obtained through the Alabama
Department of Public Health's Web site at alabamapublichealth.gov.

